

OFFICE OF SHIP DISPOSAL PROGRAMS

ANNUAL REPORT FOR FISCAL YEAR 2018

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Maritime Administration



MARITIME ADMINISTRATION

OFFICE OF SHIP DISPOSAL PROGRAMS

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EXECUTIVE SUMMARY

The Maritime Administration (MARAD) publishes this report annually to provide previous Fiscal Year information on the disposition of MARAD's non-retention vessels within the National Defense Reserve Fleet (NDRF) that have been determined to be obsolete and classified as non-retention vessels. The report includes information on the Fiscal Year (FY) activities of the nuclear retention vessel N.S. Savannah (NSS), a program administered within the Office of Ship Disposal Programs (OSDP).

LOW NUMBER OF VESSELS AWAITING DISPOSAL

MARAD's Ship Disposal Program (SDP) continues to meet or exceed key performance measures related to the disposal of non-retention ships including the removal of more obsolete vessels annually than the average number of vessels entering the disposal queue. At the end of FY 2018, there were eight non-retention ships remaining in two of MARAD's three NDRF sites and three at the U. S. Navy's Naval Inactive Ship Maintenance Office (NISMO) in Philadelphia, PA, awaiting disposal through MARAD's Ship Disposal Program (SDP). Noteworthy success in FY 2018 include the rebound in scrap steel prices and the sale of three non-retention vessels for recycling crediting approximately \$3.0 million into the Vessel Operating Revolving Fund (VORF). In addition, MARAD, as agent for the United States Coast Guard (USCG), awarded ship recycling and dry-docking contracts for two USCG buoy tenders, IRIS (WLB-395) and PLANETREE (WLB-307) located in the Suisun Bay Reserve Fleet (SBRF). The two vessels are owned by the USCG, were never transferred into the NDRF and MARAD provided custodial care during their long term lay-up in the SBRF. The SDP shall provide project management, and contract administration services during the recycling of the two vessels at a MARAD qualified domestic ship recycling facility in Texas.

NON-RETENTION VESSEL REMOVALS FROM THE NDRF IN FY 2018

In FY 2018, MARAD removed for disposal a total of five obsolete NDRF vessels from the James River Reserve Fleet (JRRF) and Beaumont Reserve Fleet (BRF). Table 1 below identifies the fleet, date, contract type and name of the vessels removed for disposal in FY 2018.

Table 1: Vessel Removals in FY 2018

Vessels Removed in FY 2018				
Fleet	Month Awarded	Date Removed	Vessel	Contract Type
JRRF	October	10/19/2017	HARKNESS	Service
JRRF	October	10/25/2017	CAPE JOHNSON	Service
BRF	April	5/3/2018	OBSERVATION ISLAND	Sale
BRF	April	5/24/2018	TRIPOLI	Sale
BRF	August	8/28/2018	CAPE LOBOS	Sale

BEST VALUE PROCUREMENT

MARAD uses a two-step source selection process, first by qualifying ship recycling facilities and creating a pool of qualified facilities that are then eligible to submit competitive sales offers or price revisions when requested by MARAD. Ship recycling contracts are awarded for the sale or purchase of ship recycling services based on best value to the Government, consistent with the Federal Acquisition Regulation (FAR) procedures and processes for simplified acquisitions. When determining best value, MARAD considers price and non-price factors of performance schedule, facility capacity and past performance. The best value source selection process allows the government to accept an offer other than the best-priced offer, considering both price and non-price factors, that provides the greatest overall benefit to the government.

In FY 2018, MARAD awarded three single ship best value ship recycling sales contracts for three BRF vessels, which returned the highest offered single ship sales price. In addition, MARAD awarded a single lot best value ship recycling service contract for two USCG vessels located in the (SBRF), which returned the lowest offered price quotation.¹

SALES REVENUE AND DISTRIBUTION

The three vessels sold for recycling in FY 2018 generated \$3,030,859 in sales revenue, which was credited into the (VORF) account. Revenues from the sale of obsolete NDRF vessels do not supplement SDP appropriations. The National Maritime Heritage Act (NMHA)² requires the allocation and distribution of obsolete vessel sales proceeds into the VORF. The distribution of the vessels sale proceeds from the VORF provides 50% for NDRF acquisition, repair and maintenance; 25% for the United States Merchant Marine Academy (USMMA) and the six State Maritime Academies (SMA) expenses; and 25% to the National Park Service (NPS) to carry out the National Maritime Heritage Grant Program (NMHGP). Not less than 25% of the 25% of the amount available in each FY to the NPS shall be set aside for preservation and presentation to the public of maritime heritage property of the Maritime Administration.

Sales proceeds credited to the VORF account from ship recycling sales are only available for distribution under the funding provisions of the NMHA when the contracts under which those sales proceeds were received have been closed. Only at that time is it clear that the sales proceeds are no longer subject to claims by the recycling contractor. Recycling contractors can, and have submitted claims or issues that have been raised affecting MARAD's entitlement to the sales proceeds from various contracts. The Federal Government's full rights to the contracts' proceeds are not complete until the recycling contract is completed and the contract is closed.

To ensure that sufficient funds are available if a refund of all or a portion of the purchase price to the recycler is necessary, sales proceeds are placed into a VORF suspense sub-account until all contract contingent liabilities are extinguished and the contract closed. Once all contract contingent liabilities are satisfied and the contract closed, the sales proceeds are distributed from

¹ The two SBRF vessels were the USCG owned buoy tenders IRIS and PLANETREE. MARAD provided ship recycling and dry-dock contract administration services for the two vessels via an economy act transfer agreement. Each vessel is less than the 1,500 gross tons' statutory threshold and were never transferred into the National Defense Reserve Fleet.

² The NMHA was amended by the FY 2017 National Defense Authorization Act which changed the 25% distribution formula to the National Park Service and the Maritime Administration.

the suspense account into the appropriate VORF sub-accounts as per the funding requirements of the NMHA. In FY 2018, ship recycling sales revenues in the amount of \$3,030,862 have been credited to the VORF suspense account and will become available for distribution when each sales contract is completed and closed.

In FY 2018, approximately \$1,490,372 was obligated to Ready Reserve Fleet (RRF) vessels for repair and maintenance activities. Funds obligated to the USMMA and the six SMA totaled \$1,680,000. No funds were requested by the NPS to support maritime heritage projects selected in the NMGHP. MARAD expended \$820,640 in FY 2018 for the preservation and presentation to the public of MARAD's maritime heritage property from previously distributed funds.

INDUSTRY OUTREACH

In 2013, MARAD issued a revised ship recycling solicitation that streamlined the solicitation process, reduced the size and complexity of ship recycling contracts and increased the transparency of the process. MARAD has issued updates to the solicitation including better explanations of the "best value" process for award selections. In addition, MARAD posts all awarded contracts, which includes the awarded price and schedule of performance, on its acquisitions website; The Virtual Office of Acquisition (VOA). All offerors can compare their offers to the awarded offer. MARAD also offers individual debriefings upon request to discuss individual ship recycler offers and the best value decision.

In February 2018, MARAD hosted a budget rollout teleconference for the ship recycling industry whereby the Maritime Administrator presented the President's FY 2019 budget proposal. In April 2018, MARAD organized a town hall meeting in Brownsville, TX, hosting the ship recycling industry executives, Port officials, Occupational Safety and Health Administration (OSHA) representatives, Defense Logistics Agency (DLA) ship sales contracting officers, Texas General Land Office environmental specialists and the USCG Port of Brownsville Senior Vessel Safety inspector and discussed various topics of interest to all parties relative to ship recycling and hazardous material remediation. Senior MARAD leadership provided an overview of the SDP including future annual vessel disposal projections, impacts of the collapse in the price of recycled steel, actual and projected budget appropriations for the program and explained the use of the best value process for award selection. The Maritime Administrator, OSHA and DLA representatives toured the qualified ship recycling facilities and met individually with each recycler.

FEDERAL SHIP OUTREACH PROGRAM

MARAD previously identified the Federal Agencies who own and operate merchant-type vessels or vessels that can be converted to merchant-type use that meet and exceed the 1,500 gross ton statutory criteria. They include the United States Army Corps of Engineers (USACE), the Department of the Army (ARMY), United States Maritime Administration (MARAD), Department of the Navy (NAVY), NAVSEA Inactive Ships Office (Sea 21I), NAVSEA Military Sealift Command (MSC), NAVSEA Office of Naval Research, (ONR), National Science Foundation (NSF), National Oceanic and Atmospheric Administration, (NOAA), and the United States Coast Guard (USCG).

In FY 2018, MARAD canvassed each Agency requesting updates to their FY 2017 planned vessel retirement schedules. In this report MARAD has compiled for each agency a summary of the planned vessel service retirement schedules and vessels available for disposal for FY's 2019-2023.

NUCLEAR SHIP SAVANNAH

The N.S. SAVANNAH (NSS) is the world's first nuclear-powered merchant ship. It was conceived and constructed by the Eisenhower Administration as part of the Atoms for Peace Program, as a joint project that included MARAD and the former Atomic Energy Commission. MARAD operated NSS through 1970, after which it became a legacy asset; it has been maintained in Baltimore, MD in protective storage since 2008. NSS is licensed and inspected by the U.S. Nuclear Regulatory Commission (NRC) under the authority of a license that was first issued in 1965; the license has been maintained continually, and will remain in effect until it is terminated by the NRC at the conclusion of decommissioning. Decommissioning is a process defined, licensed and inspected by the NRC, with a total allowable time of 60 years for completion. MARAD's deadline to complete decommissioning is December 2031, dating back to permanent cessation of operations in December 1971.

Funding for decommissioning and license termination was appropriated in FY 2017 and 2018. MARAD formally commenced decommissioning at the start of FY 2018, and expects to complete the process and terminate the license in seven (7) years. The NSS will be disposed by MARAD after the license is terminated.

I. SHIP DISPOSAL PROGRAMS

Overview

MARAD established the SDP in 2001 to accomplish the requirements of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Pub. L. 106-398, § 3502, 114 Stat. 1654A-490 (2000) (the Act), which required the disposal of all vessels in MARAD's NDRF that were not assigned to the RRF or otherwise designated to be used for a particular purpose. In the 18-year period since FY 2001, MARAD awarded disposal contracts for 224 obsolete ships, removed 226 ships from MARAD and Navy NISMO fleet sites and completed disposal actions on 226 ships. During this period, 137 ships were downgraded from retention to non-retention status and added to the disposal queue. At the start of FY 2018, there were only 13 MARAD ships designated as non-retention and available for disposal.³ The three vessels located in the Philadelphia, PA, NISMO facility designated for disposal by MARAD are currently unavailable for disposal. It is anticipated that an additional one to three MARAD retention ships will be downgraded and added to the disposal queue annually for the foreseeable future.

Since the establishment of the Program in 2001, MARAD has aggressively pursued all feasible disposal alternatives including domestic recycling, the sale of ships for re-use, artificial reefing, deep-sinking, donation and the potential for foreign recycling. While domestic recycling continues to be the most preferred, expedient and cost-effective disposal method for MARAD's non-retention vessels, other disposal options will periodically be evaluated for disposal opportunities.

However, it should be noted that statutory and regulatory restrictions have effectively precluded foreign dismantling of obsolete vessels as a viable Program option. Vessel export limitations imposed in FY 2009 legislation prohibit the export of NDRF vessels for recycling without MARAD certification to Congress that there is insufficient capacity for ship recycling in the U.S. Further, the Toxic Substances Control Act (TSCA) prohibits the export of polychlorinated biphenyls (PCBs) and would require a lengthy formal Environmental Protection Agency (EPA) administrative rulemaking process for an exemption allowing the export of obsolete vessels containing PCBs above the regulated limit.

Through the use of full and open competition MARAD continues to utilize all feasible disposal options available to achieve environmentally acceptable removal and disposal of its non-retention ships. MARAD's policy is to prioritize the removal for disposal of non-retention ships that are in the worst material condition with an annual goal of removing its obsolete vessels at a rate that is greater than the number of ships that are added to the disposal list annually.

Domestic Scrap Steel Prices

The MARAD ship disposal sales program is highly dependent on a robust domestic and international scrap steel market. When scrap steel sales are high MARAD sells non-retention vessels from its three NDRF fleet sites and INACTSHIPMAINTO in Philadelphia, PA, and Pearl Harbor, HI, for recycling at qualified domestic facilities in Texas and Louisiana. As scrap metal prices fall, the total amount paid for each vessel also falls as the volatility in the scrap metal

³ The 13 MARAD ships consisted of five vessels in the James River Reserve Fleet and eight vessels in the Beaumont Reserve Fleet.

market makes it more difficult for each recycler to predict future scrap steel prices to sufficiently cover fixed and variable costs. Recyclers buy vessels with an eye towards future scrap steel prices because six months or more may elapse from the time they purchase a vessel to the time they actually sell the scrap steel product into the recycling market.

Scrap steel prices rebounded sufficiently in late FY 2017 and particularly through FY 2018, allowing MARAD to sell three NDRF non-retention vessels for recycling, crediting \$3.0 million into the VORF account.

Figure A depicts the volatility of scrap steel prices in FY's 2015-2018. The domestic scrap steel market continued a downward spiral after reaching its \$400 per metric ton peak in January 2014, with the most dramatic decline occurring in 2015. By the beginning of FY 2015 scrap steel prices dropped to approximately \$368 per metric ton. By January 2015, scrap steel prices were approximately \$320 per metric ton, and by October 2015 the prices plummeted to a low of approximately \$135 per metric ton: a 58% decrease. Scrap steel prices had collapsed to levels not seen in the previous 15 years. By December 31, 2015, scrap steel prices had drifted upward to around \$142 per metric ton. From January through April 2016, scrap steel prices hovered between \$140 and \$153 per metric ton, then limped along in the \$190's per metric ton range before reaching a peak of \$200 per metric ton in August. Prices declined to \$160 per metric ton by the end of December. In January 2017, scrap steel prices began to rebound, and in February they crossed the \$200 per metric ton threshold. By April scrap steel prices had reached \$292 per metric ton. From May through September, they hovered in the \$260-\$285 per metric ton range before crossing the \$300 per ton threshold in November. From December 2017, scrap steel prices continued to increase, reaching a high of \$379 per metric ton by June before falling back to \$302 per metric ton by the end of FY 2018.⁴

Figure A: USA Scrap Steel Price Trends FY's 2015-2018



The sharp decline and slow recovery in the price of scrap steel from late 2015 through mid-2017 greatly contributed to the uneconomical domestic market for ship sales. This caused ship recyclers to shun vessel sales in favor of service contracts to minimize risk and support recycling costs on MARAD/Navy non-retention vessels. The collapse in scrap steel prices reversed the MARAD ship sales program to the point where ship sales were no longer feasible. MARAD had to procure ship recycling services with most of its remaining available appropriated funds.

The DLA had similar results when selling Navy combatant vessels for recycling.⁵ The DLA sold six vessels in February 2015 for \$52,888 and canceled its most recent sales solicitation in August 2016 when they received no technically qualified offers. The DLA did not issue a sales solicitation in FY 2018 because they are constrained from selling additional Navy combatant vessels until the Navy completes a programmatic environmental assessment for the disposal of its inactive ships. The Navy continues its consultation with the National Marine Fisheries Service (NMFS) regarding the completion of an environmental biological programmatic assessment designed to evaluate the Inactive Ships Program and its effects on threatened or endangered species and their dependent ecosystem. A component of the biological programmatic assessment is the development of a management approach to address the uncertainties with the transfer for recycling of inactive vessels that contain biofouling organisms and what impact their transit may have on the environment. Since FY 2013, the Navy has focused expending its appropriations on recycling its backlog of obsolete conventionally powered aircraft carriers. Five aircraft carriers have been awarded to three ship recyclers in Brownsville, TX.⁶

Numerous factors affect whether the recycling of non-retention vessels is accomplished through vessel sales with revenue to the Government or in the procurement of recycling services with appropriated funds. The primary factors include the market price of scrap metals, the vessel's size/condition, the type and quantity of hazardous materials, the quantity and type of recyclable materials, the amount of competition for each vessel, the duration/cost of the tow from the fleet to the recycling facility, and the cost to remove marine growth prior to towing to different biogeographical areas. The highest-costs are typically associated with SBRF vessels due to the current environmental requirement to dry-dock each vessel to remove marine growth prior to removal and start of the 5,000-mile tow to a Gulf Coast recycling facility. These cost factors render the sale of SBRF vessels the first impacted by and the last to recover from volatile scrap steel prices.

During periods of low scrap steel prices, revenues from the sale of the vessel scrap ferrous and non-ferrous metals are insufficient to cover the fixed costs of purchase, towing, insurance, and labor much less the unknown costs for hazardous material remediation. Predicting the market price of scrap steel five to six months after contract award, when the vessels are undergoing dismantlement, in a declining scrap steel market, along with disposal of unknown quantities of ship board hazardous materials is too great a risk for the smaller recyclers to accept. These factors limit competition for the purchase of vessels, with the recycling industry looking to

⁵ The Defense Logistics Agency is the Navy's designated sales agent for the disposal of conventional combatant type-vessels via recycling.

⁶ MARAD and the Navy have qualified a number of the same facilities to perform ship recycling. The three facilities qualified by Navy to dismantle aircraft carriers are also the largest recyclers qualified by MARAD. Collectively they account for the majority of MARAD and Navy ship recycling contract awards.

MARAD and the Navy to subsidize the disposal of non-retention vessels through the procurement of ship recycling services.

MARAD requests annual ship disposal program funding to mitigate the volatility of the scrap steel markets, continue disposal of the worst conditioned vessels and to help maintain an industrial base of qualified ship recycling facilities. Flexibility to quickly pivot from ship sales to procurement of recycling services, in response to the volatility of scrap steel prices, provides MARAD continuity of ship disposal awards, which minimizes increasing the backlog of obsolete vessels in the fleets, continues the removal of the worst conditioned vessels and minimizes the threat of potential environmental incidents.

Domestic Recycling Industry

At the start of FY 2018, there were five qualified MARAD ship recycling facilities all located on the Gulf Coast in Louisiana and Texas. The number of qualified ship recycling facilities remained steady throughout FY 2018. MARAD currently does not have qualified ship recycling facilities on either the East or West coasts. The lack of qualified ship recycling facilities on the East and West coasts contributes to higher ship recycling costs particularly during down turns in the price of scrap steel. This is especially evident on the West coast where MARAD must use appropriated funds to procure dry-docking services to remove aquatic fouling from the underwater hulls of SBRF vessels prior to towing to a Gulf Coast recycling facility. Sales offers are generally lower, dry-docking costs are a requirement and towing costs are higher for SBRF vessels due to the cost of the long tow and Panama Canal transit fees. Ship recycling sale solicitations are inclusive of the costs of towing and Panama Canal fees. However, MARAD independently procures dry-docking services for the SBRF vessels and must include estimated costs for these services in its annual budget requests.

Three of the five qualified ship recycling facilities are located in Brownsville, TX, and include International Shipbreaking Ltd., (ISL), All Star Metals, LLC., (ASM), and HRP Brownsville, LLC, (HRP).⁷ Since 2014, ISL has focused on dismantling obsolete, conventionally-powered naval aircraft carriers. They have expanded their facility to accommodate up to two aircraft carriers at a time. ISL has successfully dismantled the Ex-CONSTELLATION, the Ex-RANGER and is actively dismantling the Ex-INDEPENDENCE, which is on schedule for completion in December of 2018. In April, ISL purchased the Ex-MARAD vessel TRIPOLI and is actively dismantling the vessel. They are also actively dismantling three commercial oil drilling ships. ASM completed the dismantlement of the Ex-FORRESTAL in 2015. In FY 2018, they completed the dismantlement of the last two MARAD SBRF vessels removed under the Consent Decree, the CAPE BRETON and CAPE BORDA. They also completed the dismantlement of the Ex-MARAD vessels HARKNESS and CAPE JOHNSON. In April, they purchased the Ex-MARAD vessel OBSERVATION ISLAND and are actively dismantling the vessel. They have dismantled a number of commercial vessels as well. HRP Brownsville, (HRP), dba SteelCoast USA, formerly ESCO Marine, Inc., (ESCO) continues to rebound after emerging from court supervised re-organization in May of 2017. HRP has completed the recycling of the Ex-MARAD vessels SHENANDOAH and YELLOWSTONE. They are

⁷ ISL is a subsidiary of Southern Recycling, LLC which in turn is owned by the European Metal Recycling Group. ASM is a subsidiary of Scrap Metal Services, Inc. HRP Brownsville, LLC, (Hilco Redevelopment Partners), is the former ESCO Marine, Inc., which emerged from bankruptcy re-organization on May 1, 2017.

actively dismantling the aircraft carrier Ex-SARATOGA which is scheduled for completion by March of 2019. In August, they purchased the Ex-MARAD vessel CAPE LOBOS and are actively dismantling the vessel. They have been active in the commercial ship recycling market as well and have branched into the recycling of oil rig platforms.

Southern Recycling, LLC, (SOREC) based in New Orleans, operates the other two MARAD qualified ship recycling facilities, one in New Orleans and the other located in Amelia, LA. SOREC is a large metals recycling company with multiple recycling operations and locations throughout the Gulf. Ship recycling is but one line of business for this diversified company.

Domestic ship recycling capacity is currently adequate to meet MARAD's requirements given the decreasing number of non-retention ships available for disposal, the limited participation by the Navy due to their ongoing environmental consultation with the NMFS, the projected number of Federal vessel retirements during the next five years and the encouraging rebound in the price of scrap steel.

The last of the five Navy aircraft carriers undergoing dismantlement Brownsville, TX, is expected to be completed in March of 2019. The ongoing consultation between the Navy and the NMFS shows no signs of reaching a conclusion anytime soon. In addition, The Suquamish Tribe of Seattle, WA, in concert with the Washington Environmental Council and Puget Soundkeeper Alliance have sued the Navy alleging the Navy performed in-water hull cleaning of the aircraft carrier Ex-INDEPENDENCE in violation of federal clean-water laws. As a result, Navy has halted further ship recycling awards pending resolution of the litigation and conclusion of the NMFS biological consultation. However, there is concern that the current MARAD qualified domestic industrial ship recycling capacity and competition for MARAD's vessels will decrease if the Navy settles the litigation, completes the consultation with the NMFS and re-starts scrapping combatant vessels. The Navy has a back log of 28 inactive vessels designated for scrapping and re-starting domestic ship recycling may lead to the award for dismantlement of two additional Navy aircraft carriers in the next two years as well as sale awards for combatant vessels by DLA. Inundating the domestic recycling industry with the two Navy carriers, combatant and non-combatant vessels, while a boon to the industry in the short term, would reduce competition for the sale for recycling of MARAD vessels thus lowering sale revenue into the VORF.

The evidence of less available capacity was first evident in FY 2014, with the lack of offers on MARAD vessels by recyclers that were awarded Navy aircraft carrier disposal contracts. In FY 2015, low scrap steel prices reduced available capacity as ship recyclers, unable to cover fixed costs through vessel sales, choose not to participate in MARAD ship recycling sales announcements. Volatile scrap steel prices coupled with future price uncertainty increase risk for ship recycling operations. Under capitalized companies are less competitive and increasingly rely on Government service contracts to sustain operations.

Federal Ship Outreach

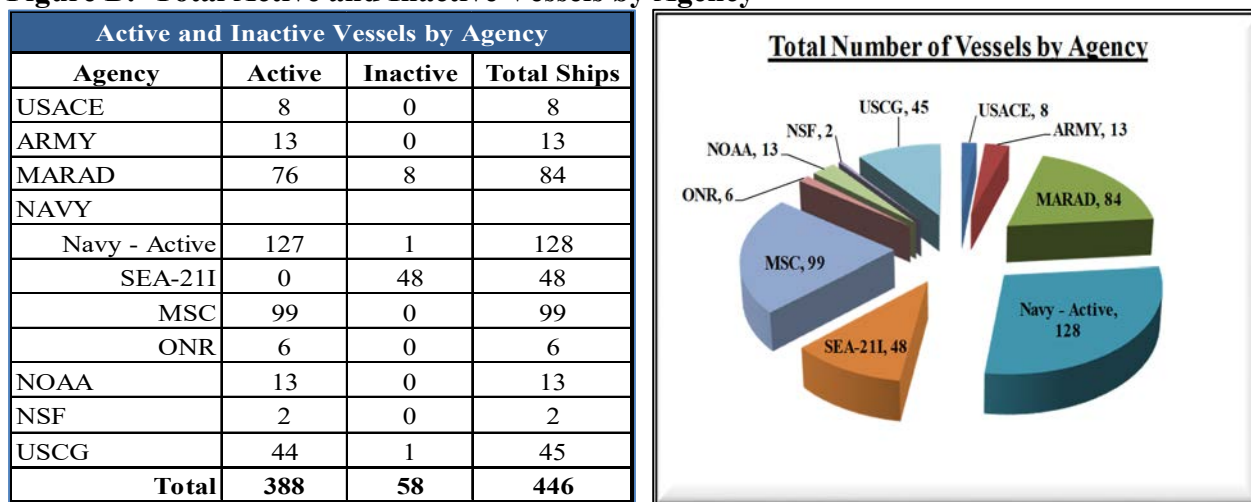
In FY 2018, MARAD requested updates to planned vessel disposal status and retirements dates from the Federal Agencies who own and operate merchant-type vessels or vessels that can be converted to merchant type use that meet and exceed the 1,500 gross ton statutory criteria of 40 USC Section 548 – Surplus vessels. MARAD maintains a Federal Ship database incorporating

each agency’s combatant and/or merchant-type vessels comprising the following information; ownership, principal characteristics, gross tonnage, construction date, age and estimated retirement date. Included in the compilation of vessels are active Navy combatant vessels with the exception of nuclear powered aircraft carriers and submarines as these vessels will be recycled by the Navy at Commercial or Naval Shipyard facilities with nuclear decontamination and dismantlement expertise.⁸ MARAD did not include any nuclear-powered submarines or aircraft carriers except Ex-ENTERPRISE (CVN 65), nor any vessels under 1,500 gross tons such as mine sweepers, yard tugs and patrol craft.

This report does not distinguish Navy Battle Force Ships from Non-Battle Force Ships. Battle Force Ships are commissioned United States Ship (USS) warships capable of contributing to combat operations, or a United States Naval Ship (USNS) that contributes directly to Navy warfighting or support missions. The Navy maintains the most current Battle Force Ship count on the Naval Vessel Register located on the web at www.nvr.navy.mil.

MARAD furnished each agency a list of their vessels from the Federal Ship database and requested they confirm and verify the data provided.⁹ Figure B summarizes the Active and Inactive Vessels by Agency. The pie-chart on the right provides a graphical depiction of the total number of vessels owned by each agency.

Figure B: Total Active and Inactive Vessels by Agency



The largest concentration of active and inactive vessels is within the Navy. The total number of active and inactive vessels within the Navy is 281 or 63 percent of the total. MARAD is second with 84 active and inactive vessels representing 19 percent of the total. Combined MARAD and Navy account for 365 active and inactive vessels or 82 percent of the total.

⁸ The one exception being the Ex-Enterprise (CVN-65). The Navy is exploring various disposal options for the vessel including, potentially, conventional dismantling of the non-nuclear sections of the vessel at a shipyard or ship recycling facility.

⁹ MARAD can request each agency’s participation but has no statutory enforcement authority to compel any agency to dispose of its Government–owned merchant type vessels greater than 1,500 gross tons through the Maritime Administration.

Figure C: Inactive Vessels by Agency

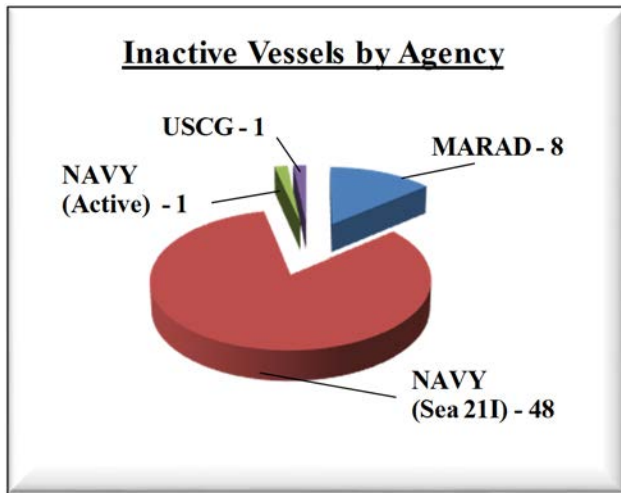


Figure C identifies each agency’s portion of the 61 vessels designated as inactive. SEA21I lists 48 vessels as inactive of which , eight are earmarked for Foreign Military Sales and four are targeted for Deep Sink Exercises (SINKEX), leaving 36 vessels designated for recycling. MARAD has 8 vessels designated as inactive (non-retention) and available for disposal. There is one vessel each at Navy - Active and USCG designated as inactive however, none are available for disposal. MARAD’s 8 vessels represent 14 percent of the inactive vessels while the Navy SEA 211’s 51 vessels represent 83 percent of the inactive vessels.

Combined MARAD and SEA 211 have 46 vessels or 98 percent of the total vessels designated as inactive. MARAD has 8 non-retention vessels available for disposal through recycling while SEA 21I has designated 36 vessels for recycling. The total number of MARAD and Navy vessels targeted for and available for recycling is 44.

Figure D lists the 48 Government vessels currently available for disposal at MARAD and SEA 21I. The vessels are sorted by design and not by priority of disposal. The vessels are identified as combatant (C) or merchant type, (MT), and include; design description, active and inactive status, year built, vessel age and planned disposal disposition. For clarity, a color code is used to represent the vessel disposal disposition. Currently, only MARAD and SEA 21I have vessels available for disposal.

Figure D: Inactive Vessel Dispositions

United States Maritime Administration - MARAD								
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal
1	Cape Florida	MT	Break Bulk	Inactive	1971	48	Scrap	X
2	Cape Gibson	MT	Break Bulk	Inactive	1968	51	Scrap	X
3	Cape Archway	MT	Break Bulk	Inactive	1963	56	Scrap	X
4	Cape Alexander	MT	Break Bulk	Inactive	1962	57	Scrap	X
5	Cape Alava	MT	Break Bulk	Inactive	1962	57	Scrap	X
6	Equality State	MT	Crane Ship	Inactive	1962	57	Scrap	X
7	Simon Lake	MT	Submarine Tender	Inactive	1964	55	Scrap	X
8	Sumner	MT	Surveying Ship	Inactive	1992	27	Scrap	X

Navy Inactive Ships Office (SEA 211)

No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal
1	Ex-Kitty Hawk (CV-63)	C	Aircraft Carrier	Inactive	1960	59	Scrap	X
2	Ex-John F. Kennedy (CV-67)	C	Aircraft Carrier	Inactive	1967	52	Scrap	X
3	Ex-Ponce (AFSB-15)	MT	Afloat Forward Staging Base	Inactive	1970	49	Scrap	X
4	Ex-Charleston (LKA-113)	MT	Amphibious Cargo Ship	Inactive	1967	52	Scrap	X
5	Ex-Durham (LKA-114)	MT	Amphibious Cargo Ship	Inactive	1968	51	SINKEX	X
6	Ex-El Paso (LKA-117)	MT	Amphibious Cargo Ship	Inactive	1969	50	Scrap	X
7	Ex-Mobile (LKA-115)	MT	Amphibious Cargo Ship	Inactive	1968	51	Scrap	X
8	Ex-Shreveport (LPD-12)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X
9	Ex-Dubuque (LPD-8)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X
10	Ex-Denver (LPD-9)	MT	Amphibious Transport Dock	Inactive	1965	54	Scrap	X
11	Ex-Nashville (LPD-13)	MT	Amphibious Transport Dock	Inactive	1967	52	Scrap	X
12	Ex-Juneau (LPD-10)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X
13	Ex-Cleveland (LPD-7)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X
14	Ex-Charles F. Adams (DDG-2)	C	Destroyer	Inactive	1959	60	Scrap	X
15	Ex-Barry (DD-933)	C	Destroyer	Inactive	1955	64	Scrap	X
16	Ex-Ticonderoga (CG-47)	C	Guided Missile Destroyer	Inactive	1981	38	Scrap	X
17	Ex-Yorktown (CG-48)	C	Guided Missile Destroyer	Inactive	1983	36	Scrap	X
18	Ex-Vandegrift (FFG-48)	C	Guided Missile Frigate	Inactive	1982	37	Scrap	X
19	Ex-Elrod (FFG-55)	C	Guided Missile Frigate	Inactive	1984	35	FMS	X
20	Ex-Simpson (FFG-56)	C	Guided Missile Frigate	Inactive	1984	35	FMS	X
21	Ex-Kauffman (FFG-59)	C	Guided Missile Frigate	Inactive	1986	33	FMS	X
22	Ex-Rodney M. Davis (FFG-60)	C	Guided Missile Frigate	Inactive	1986	33	Scrap	X
23	Ex-Ingraham (FFG-61)	C	Guided Missile Frigate	Inactive	1988	31	SINKEX	X
24	Ex-De Wert (FFG-45)	C	Guided Missile Frigate	Inactive	1982	37	FMS	X
25	Ex-Robert G. Bradley (FFG-49)	C	Guided Missile Frigate	Inactive	1983	36	FMS	X
26	Ex-Halyburton (FFG-40)	C	Guided Missile Frigate	Inactive	1981	38	FMS	X
27	Ex-Ford (FFG-54)	C	Guided Missile Frigate	Inactive	1984	35	SINKEX	X
28	Ex-Klakring (FFG-42)	C	Guided Missile Frigate	Inactive	1982	37	FMS	X
29	Ex-Carr (FFG-52)	C	Guided Missile Frigate	Inactive	1983	36	FMS	X
30	Ex-Curts (FFG-38)	C	Guided Missile Frigate	Inactive	1982	37	SINKEX	X
31	Ex-Samuel B Roberts (FFG-58)	C	Guided Missile Frigate	Inactive	1984	35	Scrap	X
32	Ex-Nicholas (FFG-47)	C	Guided Missile Frigate	Inactive	1983	36	Scrap	X
33	Ex-Underwood (FFG-36)	C	Guided Missile Frigate	Inactive	1982	37	Scrap	X
34	Ex-John L Hall (FFG-32)	C	Guided Missile Frigate	Inactive	1981	38	Scrap	X
35	Ex-Boone (FFG-28)	C	Guided Missile Frigate	Inactive	1980	39	Scrap	X
36	Ex-Stephen W Groves (FFG-29)	C	Guided Missile Frigate	Inactive	1981	38	Scrap	X
37	Ex-Hawes (FFG-53)	C	Guided Missile Frigate	Inactive	1984	35	Scrap	X
38	Ex-Mohawk (T-ATF-170)	MT	Fleet Ocean Tug	Inactive	1980	39	Scrap	X
39	Ex-Hayes (T-AGOR-16)	MT	Oceanographic Research	Inactive	1970	49	Scrap	X
40	Ex-Boulder (LST-1190)	MT	Tank Landing Ship	Inactive	1970	49	Scrap	X

Legend		Disposition Summary		
MT	Merchant Type Vessel	Retain	0	
C	Combatant Vessel	SINKEX	4	
Active	Operating/Readiness/Support status	Foreign Military Sales	8	
Inactive	Non-operating/Non-retention status	Scrap	36	
X	Foreign Military Sales	Donation	0	
X	SINKEX	TBD	0	
X	Scrap	Total Inactive	48	
X	Donation	Total Active	0	
X	Remove From Service	Total Number of Ships	48	

The Disposition Summary totals are inclusive of both MARAD and Sea 211 vessels.

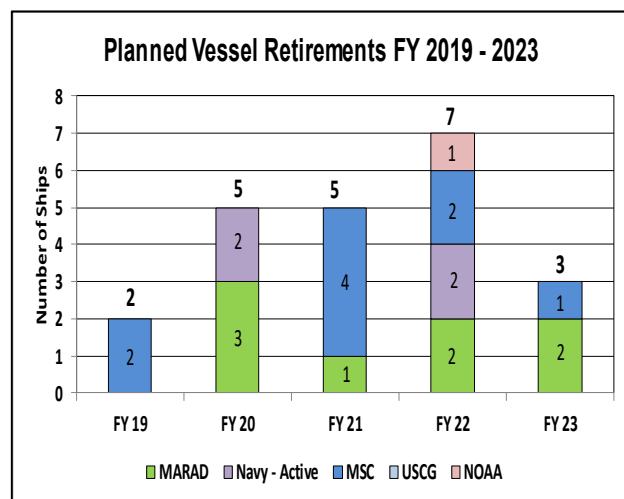
Planned Vessel Retirement Schedules

Agency vessel retirement schedules reflect the year the vessel is planned to be taken out of service, not the specific year the vessel will be disposed. In each case the exact date the vessel will be available to MARAD or the Navy for disposal is predicated on completion of specific vessel disposal preparations. Each agency has definitive vessel disposal preparation procedures such as demilitarization, classified equipment removal, defueling, hazardous material remediation and historical assessments that must be completed prior to commencement of actual disposal. In addition, as vessels are prepared for disposal, compliance with environmental regulations such as the National Environmental Policy Act (NEPA), the Federal Water Pollution Control Act known as the Clean Water Act (CWA), the Clean Air Act and the National Invasive Species Act (NISA) must be incorporated into planning and budgeting decisions.

Congressional authorizations/appropriations, vessel utilization, service life extensions, vessel new build replacements and funding all affect the retirement date decision. The exact retirement dates and disposal actions are subject to continual revision. In some instances, a vessel may be taken out of service and placed in a retention status for potential re-activation at a future date or held for an indeterminate period of time for logistical support for similar class operating vessels. Congressional approval, mission utility, vessel condition and service life all play a role in a vessel retention disposal analysis. Further, relocation of a vessel to a MARAD or Navy fleet anchorage, sale of the vessel from its home port, procurement of recycling services and compliance with environmental statutes such as mitigation of invasive species all have cost implications that must be recognized, addressed and budgeted. The actual vessel disposal decision cannot be made until completion of cost benefit or service life extension analysis and the budgeting process addresses all potential vessel disposal costs. Vessel specific disposal dates are therefore unknown until completion of all vessel disposal analysis. Figure E provides a summary of the planned vessel service retirement schedules for FY's 2019-2023 for each agency. Figure F provides a listing by each agency of the vessels planned for service retirement in FY's 2019-2022.

Figure E: Vessel Service Retirement Summary by Agency FY 2019- 2023

Agency	Fiscal Year Removed from Service					5-Year Total
	FY 19	FY 20	FY 21	FY 22	FY 23	
USACE	0	0	0	0	0	0
ARMY	0	0	0	0	0	0
MARAD	0	3	1	2	2	8
NAVY						
Navy - Active	0	2	0	2	0	4
SEA 21I	0	0	0	0	0	0
MSC	2	0	4	2	1	9
ONR	0	0	0	0	0	0
NOAA	0	0	0	1	0	1
NSF	0	0	0	0	0	0
USCG	0	0	0	0	0	0
FY Removal	2	5	5	7	3	
	Total 5-Year Removed from Service					22



To avoid double counting the planned vessels scheduled for retirement from service by Navy - Active and MSC are not included in the fiscal year totals for the Sea 21I since they have not yet been transferred for final disposition.

Figure F: Planned Vessel Retirements by Agency FY's 2019 – 2023

United States Maritime Administration - MARAD														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	Cape Mohican	MT	Barge Ship	Active	1973	46	Scrap						X	2023
2	Cape Girardeau	MT	Break Bulk	Active	1968	51	Scrap			X				2020
3	Cape Jacob	MT	Break Bulk	Active	1961	58	Scrap			X				2020
4	Cape Nome	MT	Break Bulk	Active	1969	50	Scrap					X		2022
5	Diamond State	MT	Crane Ship	Active	1960	59	Scrap			X				2020
6	Admiral Callaghan	MT	Roll-On/Roll-Off	Active	1968	51	Scrap						X	2023
7	Petersburg	MT	Tanker	Active	1963	56	Scrap				X			2021
8	Empire State	MT	Training Ship	Active	1962	57	Scrap					X		2022

United States Department of the Navy - MSC														
Military Sealift Command Active Vessels														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	USNS 1st LT Harry L. Martin (T-AK 3015)	MT	Container Roll-On/Roll-Off	Active	1983	36	Scrap		X					2019
2	USNS Sioux (T-ATF 171)	MT	Fleet Ocean Tug	Active	1980	39	Scrap				X			2021
3	USNS Apache (T-ATF 172)	MT	Fleet Ocean Tug	Active	1981	38	Scrap				X			2021
4	USNS Catawba (T-ATF 168)	MT	Fleet Ocean Tug	Active	1979	40	Retain		X					2019
5	USNS John Lenthall (T-AO 189)	MT	Fleet Oiler	Active	1986	33	Retain				X			2021
6	USNS Walter S. Diehl (T-AO 193)	MT	Fleet Oiler	Active	1987	32	Retain				X			2021
7	USNS Joshua Humphreys (T-AO 188)	MT	Fleet Oiler	Active	1986	33	Scrap					X		2022
8	USNS Pecos (T-AO 197)	MT	Fleet Oiler	Active	1989	30	Scrap						X	2023
9	USNS Leroy Grumman (T-AO 195)	MT	Fleet Oiler	Active	1988	31	Retain					X		2022

United States Navy - Active Vessels														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	USS Bunker Hill (CG 52)	C	Guided Missile Cruiser	Active	1985	34	Retain			X				2020
2	USS Mobile Bay (CG 53)	C	Guided Missile Cruiser	Active	1985	34	Retain			X				2020
3	USS Antietam (CG 54)	C	Guided Missile Cruiser	Active	1986	33	Retain					X		2022
4	USS Leyte Gulf (CG 55)	C	Guided Missile Cruiser	Active	1986	33	Retain					X		2022

National Oceanic and Atmospheric Administration - NOAA														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	Oscar Elton Sette	MT	Research Vessel	Active	1987	32	Retain					X		2022
Legend		Disposition Summary					FY 2019		Planned Removal from Service Summary					
MT	Merchant Type Vessel		Retain	9			Avail for	Fiscal Year Removed from Service					5-Year Total	
C	Combatant Vessel		SINKEX	0			Disposal	FY 19	FY 20	FY 21	FY 22	FY 23		
Active	Operating/Readiness/Support status		Foreign Military Sales	0			0	2	5	5	7	3	22	
Inactive	Non-operating/Non-retention status		Scrap	13										
X	Foreign Military Sales		Donation	0										
X	SINKEX		TBD	0										
X	Scrap		Total In-Active	0			* This represents the total number of vessels greater than 1,500 gross tons expected to be retired from service in the next five fiscal years. Retirement dates are subject to change relative to mission utility, appropriations and availability of replacement vessels where applicable.							
X	Donation		Total Active	22										
X	Remove From Service		Total Ships*	22										

European Ship Recycling Regulation

The Ship Recycling Regulation adopted in 2013 by the European Parliament and the Council of the European Union (EU) aims to reduce the negative impacts linked to the recycling of ships flying the flag of Member States of the European Union. The Regulation lays down requirements that ships and recycling facilities have to fulfil in order to make sure that ship recycling takes place in an environmentally sound and safe manner.

The Regulation first prohibits or restricts the installation and use of hazardous materials such as asbestos or ozone-depleting substances on board ships. New European ships and EU-flagged ships sent for recycling must also have on board an inventory of hazardous materials verified by the relevant administration or authority and specifying the location and approximate quantities of those materials. This requirement commences on December 31, 2020 and applies to all existing ships sailing under the flag of Member States of the European Union as well as to ships flying the flag of a third country and calling at an EU port or anchorage.

The goal is to facilitate safe recycling of vessels and reduce the presence of toxic materials on board ships. In November 2016, the European Maritime Safety Agency, published a Best Practice Guidance on the Inventory of Hazardous Materials for practitioners on the field, ship owners and national authorities. EU Member States' port authorities will control ships to verify whether they have on board a ready-for-recycling certificate or a valid inventory of hazardous materials.

The Ship Recycling Regulation proposes requirements for ship recycling facilities wishing to recycle EU flag vessels. The regulations will apply to both European ship recycling facilities and facilities located in other countries that become EU qualified. The goal for the EU is to establish a list of qualified ship recycling facilities, internal and external to the EU that meets the requirements of the regulation. In addition, the EU wishes to implement through the Ship Recycling Regulation most of the aspects of the Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships. The EU proposes, as an inducement to ship owners to recycle their vessels only at facilities on the EU list, a ship recycling license or fee. The license or fee would be a monthly or annual assessment levied on all ships calling on EU Ports, regardless of flag. Funds collected under this scheme would be used by the owner of the vessel to pay the recycling/scraping differential between clean (qualified) recycling facilities and unclean (Indian, Pakistan) recycling facilities. Ship recycling facilities, both internal and external to the EU seeking to become qualified under the EU Ship Recycling Regulation submitted facility applications to the EU by July 1st, 2016. The EU through third party organizations conducted the application evaluations and site visit inspections.

The EU adopted the first version of 18 approved European ship recycling facilities in December 2016. In the final update posted on December 6, 2018, the EU had approved 23 ship recycling facilities in 12 EU member countries and three ship recycling facilities located in non EU member countries; 2 in Turkey and 1 in the United States. The posted list of European ship recycling facilities can be found at; <http://ec.europa.eu/environment/waste/ships/list.htm>.

Beginning on December 31, 2018, large commercial seagoing vessels flying the flag of an EU Member State may be recycled only in safe and sound ship recycling facilities included in the European List of ship recycling facilities.

Environmental Stewardship

MARAD published, in August of 2009, its Final Programmatic Environmental Assessment for the Removal and Disposal of Non-Retention Vessels from the NDRF. Further, MARAD implemented strong measures to protect the environment in disposing of obsolete vessels. The Agency initiated a program in June 2009 to dry-dock SBRF vessels to achieve NISA compliance prior to towing the ships to recycling facilities in other bio-geographical areas, and by September 2009 satisfied all requirements under the NEPA, thereby eliminating a legal barrier to removing SBRF vessels.

In September 2009, MARAD contracted with, at that time, the only available San Francisco area dry-dock facility for dry-docking services to remove marine growth from the hull and exfoliated paint from topside surfaces. The cleaning of marine growth and loose exterior paint on dry-dock is accomplished prior to the towing of SBRF vessels to recycling facilities in different bio-geographical areas to mitigate the transfer of potential invasive marine species and to mitigate the exfoliating of paint during transit. The dry-docking of MARAD's SBRF vessels satisfactorily resolved many of the legal challenges associated with aquatic invasive species and non-permitted discharges related to NISA and the CWA.

MARAD also worked to ensure compliance with the requirements of the CWA within Texas and Virginia for facility operational activities at the JRRF and BRF. Agreement from regulatory agencies in Virginia and Texas was previously acquired pertaining to the stringent MARAD led initiative in-water process for removal and capture of marine growth from vessel hulls prior to departure to a recycling facility in a different bio-geographical area.

Ship Disposal Alternatives

While domestic dismantling/recycling, sale of ships for re-use, artificial reefing, deep-sinking and donations are all disposal alternatives available to and utilized in the past by MARAD, dismantling/recycling is the most expedient and cost-effective method. Table 2 below shows the number of vessels awarded for disposal since FY 2001 by each method. The 214 ships awarded in recycling contracts represent 96% of the 224 total vessels awarded by MARAD since 2001. The other 10 vessels were disposed of through the other four disposal methods for which there is significantly less demand and greater cost for the Federal government.

The Toxic Substances Control Act (TSCA) of 1976, 15 U.S.C. §2601, administered by the EPA, bans the export of and prohibits the distribution in commerce of PCBs. The manufacture of PCBs in the US was banned in 1979. EPA utilizes 1985 as the threshold year after which it is unlikely that any PCB products or components remained in supply streams for use in vessel construction or repairs.

Under TSCA, the sale for re-use, donation or artificial reefing of MARAD's remaining non-retention vessels built prior to 1985 requires the vessels be remediated, to the 2006 National Guidance: Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs, of all regulated levels of PCBs to the satisfaction of the EPA prior to transfer to a recipient. The process of remediating PCBs from non-retention ships built prior to 1985 is an onerous, costly process requiring extensive sampling and testing before the vessel can be cleaned. An extensive vessel remediation, cleaning and third party verification plan approved in advance by the EPA is required as part of any vessel re-use, donation and artificial reefing application. This does not

include costs associated with site permitting, cleaning the vessels underwater hull for compliance with the United States Coast Guard Ballast Water Management Act and the Aquatic Invasive Species Act.

MARAD’s available non-retention vessels were built prior to 1985 and, as such are likely to contain PCB’s above regulated limits in their construction. In addition, the vessels have been extensively stripped of equipment and components and are in generally poor material condition. The restrictions of TSCA, permitting and the high costs associated with vessel preparation have proven burdensome in obtaining and preparing vessels for ship disposal alternatives. Therefore, MARAD does not offer non-retention vessels built prior to 1985 for re-use, donation or artificial reefing.

Table 2: Vessel Awards by Fiscal Year

Vessel Awards by Disposal Option by Fiscal Year																			
Type of Disposal	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	Totals
Recycling (Fee for Service)	5	2	15	11	16	13	14	4	8	11	10	0	0	3	2	1	4	2	121
Recycling (Sales)	0	0	0	2	1	5	4	16	5	0	8	16	19	8	5	1	0	3	93
Artificial Reefing	1						2			1									4
SINKEX					2														2
Donation								1											1
Sale for Reuse							3												3
Totals	6	2	15	13	19	18	23	21	13	12	18	16	19	11	7	2	4	5	224

Through September 30, 2018. The two fee for service awards in FY 2018 are the two USCG Buoy Tenders removed from the SBRF for recycling in Texas.

The Agency has three qualified ship recycling facilities in Brownsville, TX and one each in New Orleans, and Amelia, LA. MARAD qualifies ship recycling facilities to ensure the offeror has control of the recycling facility, sufficient knowledge, applicable infrastructure, resources and capabilities to successfully dispose of obsolete MARAD, Navy, or other Federal Agency vessels while protecting the environment and worker health and safety. The Navy’s ship disposal program, which includes Navy service contracts for combatant vessels and combatant vessel sales for recycling coordinated by DLA, utilizes some of the same facilities. The three recycling contractors currently used by the Navy for dismantling/recycling of its conventional aircraft carriers are also qualified contractors under MARAD’s Program and are considered the three largest domestic ship recycling facilities with the greatest throughput capacity. The award by the Navy of two-year ship recycling contracts in FY’s 2014–2017 for five aircraft carriers and the contract awards for smaller combatant vessels by DLA in FY 2015 initially limited competition for MARAD contract awards. The collapse of the price of scrap steel, lack of ship sales by

MARAD and the Navy in FY's 2015-2017 and minimal appropriations to fund ship recycling service contracts mitigated this industrial capacity shortage. To accommodate the resulting shortage of Federal vessels for recycling the domestic ship recycling industry diversified by recycling commercial vessels and oil rigs. MARAD has benefited from the resurgence in the price of scrap steel from FY's 2017-2018 with the sale of three vessels and the anticipated sale of another vessel in early FY 2019. However, the inability of Navy to offer ships for sale or service contracts due to the NMFS consultation and ongoing environmental litigation and MARAD's historic low number of vessels available for disposal will limit the number of ships awarded for recycling in the foreseeable future.

Best Value Ship Disposal Source Selection Process

The Program utilizes simplified acquisition procedures authorized in Federal Acquisition Regulation (FAR) Part 13, in a competitive procurement process, to facilitate the disposal of MARAD's obsolete vessels through both the sale of vessels for recycling and for the procurement of recycling services. MARAD has issued a standing Request for Proposal (RFP) which allows interested vendors to submit technical proposals on a continuous basis. Technical proposals must address, in addition to business and operational procedures, environmental and worker safety and health considerations.

Offerors whose proposals are determined to be technically acceptable form a pool of qualified facilities eligible to compete for sales and service contracts for specific ships identified by MARAD. Offers are evaluated on a best-value basis whereby MARAD considers price and the non-price factors of performance schedule/facility capacity and past performance. As permitted under the simplified acquisition procedures, the relative order of importance of the evaluation factors is not stated in the solicitation. The importance of the evaluation factors for each of the vessel awards is not specified because the trade-offs necessary for selecting the multiple awards are often made based on the specific offers received. This approach also results in a reasonable, timelier and less complicated selection process. The Government Accountability Office assessed MARAD's ship disposal program source selection process and concluded in its February 2014 report to Congressional Committees that MARAD's current ship disposal process for making source selection decisions for vessel sales and price revisions for ship recycling awards is consistent with the FAR's procedures and processes for simplified acquisitions and determining best value.

As an example, a recycling facility may offer the highest sales prices for three ships; however, based on their existing/scheduled workload and available resources, the facility is only capable of accepting and actively working two vessels. A second facility offers a lower sales price for the third ship, but has the capacity to start immediately and can complete the work in a reasonable period of time. In this example, for the potential award of a third vessel to the second facility, capacity/schedule outweighs the higher sale price. This simplified example of the iterative process used to select the best value offer(s) illustrates how the relative importance of the factors may change during the selection process and, as such, cannot be stated with certainty before or at the time of the request for offers/prices. Different trade-offs between price and non-price factors may be warranted depending upon the number of awards being considered for an individual offeror.

MARAD publicly posts the awarded contracts on its web site, disclosing the price and the performance schedule of the successful offeror. MARAD also provides each offeror the opportunity for a debriefing after the contract awards are publicly posted. Most often, offerors do not request debriefings because the reason for the award selection is evident from the awarded and publicly posted contract price and/or performance schedule.

Since November 2008, MARAD's recycling solicitations have awarded contracts on a best-value basis for both sales contracts and service contracts. MARAD awarded a total of 104 vessels for recycling from November 2008 through FY 2018 from NDRF and Navy fleet sites. Of the 104 awards, 65 were sales and 39 were service contracts and 83%, (86 of 104), were made to the highest sales offer or the lowest price quotation for a service contract. Therefore, while the relative importance of the evaluation factors is not stated in the solicitation, price is clearly a significant factor though not the sole factor. Achievement of 83% of the best value awards that result in the maximum return or least cost, is assessed to be in the best interest to the U.S. Government and adheres closely to the statute.

Ship Disposal Funding

There are several factors that affect whether the recycling of non-retention NDRF ships are accomplished through vessel sales with revenue to the Government or through service contracts with MARAD paying for recycling services using appropriated funds. The primary factors include the market price of scrap metals, the vessel's size/condition, the type and quantity of hazardous materials, the quantity and type of recyclable materials, the amount of competition for each vessel, the duration/cost of the tow from the fleet to the recycling facility and the cost to remove marine growth prior to towing to different bio-geographical areas. The highest costs are typically associated with SBRF vessels due to the requirement to dry-dock each vessel to remove marine growth prior to removal and commencement of the 5,000-mile tow to a Gulf Coast recycling facility. Included in the offeror's proposal are tug mobilization and towing cost, fuel and Panama Canal transit fees. Table 3 below shows the enacted appropriations to the SDP for FY's 2011-2018 and the apportionments to the NSS for FY's 2015-2018.

Table 3: Ship Disposal Annual Appropriations

Annual Ship Disposal Appropriations by Fiscal Year								
Fiscal Year	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Appropriation	\$12 M	\$2.5M	\$2.4 M	\$2.0M	\$2.0M /1	\$2.0M /2	\$7.0M /3	\$6.0M /4

/1 Represents the Ship Disposal Program apportionment of the \$4.0M Ship Disposal appropriation in the Consolidated and Further Continuing Appropriations Act, 2015. The \$2.0M balance was apportioned to the *NS Savannah* for ongoing protective storage activities required under the Nuclear Regulatory Commission license.

/2 Represents the Ship Disposal Program apportionment of the \$5.0M Ship Disposal appropriation in the Consolidated Appropriations Act, 2016. The \$2.0M balance was apportioned to the *NS Savannah* for ongoing protective storage activities required under the Nuclear Regulatory Commission license.

/3 Represents the Ship Disposal Program apportionment of the \$10.0M Ship Disposal appropriation in the Consolidated Appropriations Act of 2017. \$2.0M is for Program salaries and overhead leaving \$5M for vessel disposals. The \$3.0M balance was apportioned to the *NS Savannah* for ongoing protective storage activities required under the Nuclear Regulatory Commission license. Separately *NS Savannah* was appropriated \$24M to begin Phase I decommissioning of the de-fueled nuclear components on the vessel.

/4 Represents the Ship Disposal Program apportionment of the \$116M Ship Disposal appropriation in the Consolidated Appropriations Act of 2018. \$2M of the \$6M is for Program salaries and overhead expense. Of the \$110M balance \$3M was apportioned to the *NS Savannah* for ongoing protective storage activities required under the Nuclear Regulatory Commission license. The remaining \$107M was apportioned for the completion of Phase II and III of the *NS Savannah* decommissioning project. The FY 2017 appropriation of \$24M coupled with the FY 2018 appropriation of \$107M provides a total of \$131M by which to commence and complete without interruption the planned seven year three Phase decommissioning of the vessel’s nuclear power plant.

Appropriations for ship disposal had been at the \$12M level annually from FY 2007 through FY 2011. Favorable industry and scrap steel market conditions from FY 2006 through FY 2008 boosted ship recycling sales, accumulation of annual carryover funds and the surpassing of annual ship award and removal goals. Additionally, the suspension of costly SBRF vessel removals from FY 2007 through FY 2009 because of on-going litigation in California contributed to annual funding carryovers. The economic downturn in 2008 resulted in the decline in vessel sales culminating in no vessels being sold in FY 2010, which aided in the spend down of some funding carryover, which totaled approximately \$26M in FY 2010. However, the economy and scrap steel markets began to recover in FY 2011 resulting in an increase in vessel sales for the Program and a diminished need for appropriations at the \$12M level.

In FY 2012, with a carryover of \$20M, appropriations were decreased to \$2.5M, which coincided with strong scrap steel market conditions and strong competitive bidding for contracts by domestic recyclers resulting in an increasing number of vessel sales from FY 2011, through FY 2013 (see Table 4 below). While the scrap steel market remained strong in FY 2014, available ship recycling capacity decreased due to the award of three Navy aircraft carriers recycling contracts, which resulted in weaker competition for MARAD obsolete vessels. With a carryover level of \$6.6M in FY 2014, appropriations were decreased to \$2.0M. Apportionment of the Appropriations to SDP for FY 2015 was \$2.0M with a carryover of \$3.6M.

In FY 2015, MARAD utilized the majority of its carryover funding to procure ship recycling and dry-dock services to facilitate the removal of two SBRF vessels. Scrap steel prices declined throughout all of FY 2015 to levels not seen in 15 years. The collapse in scrap steel prices caused one recycler to rescind an offer to purchase a non-retention vessel, led to the repudiation of two awarded MARAD ship recycling contracts by another recycler, and was a contributing factor in the cessation of operations at another MARAD/Navy qualified recycling facility. Funds

retained due to the termination of two SBRF ship recycling service contracts, one SBRF dry-dock contract and the re-procurement of one of the two SBRF ship recycling service contracts resulted in a carryover level of \$902K into FY 2016.

Savings from reduced expenditures in FY 2016 plus carryover funds from FY 2015 proved sufficient to award service contracts for the recycling and dry-docking, totaling \$1.65M, for one SBRF vessel in May 2016. At the beginning of FY 2017 two of the original 57 SBRF non-retention vessels included in the 2010 Consent Decree remained in the fleet. Sufficient appropriations were received in FY 2017 to remove both the SBRF vessels in July 2017, ahead of the consent decree deadline. Prior year appropriation carryovers accrued during the FY's 2011–2015 period of increased ship sales have been expended in conjunction with reduced appropriations from FY's 2012–2016. Increasing scrap steel prices in 2017 provided cost savings from lower than expected award amounts for the remaining two SBRF vessels. The savings resulted in the award of two vessels from the JRRF in September 2017. FY 2017 SDP carryover was approximately \$2.5M of which \$1.7M was expended in FY 2018 to remove freeboard ex-foliating paint from the JRRF vessel SIMON LAKE prior to disposal of the vessel.

FY 2018 continued the resurgence of scrap steel prices leading to the sale for recycling of three non-retention vessels generating approximately \$3.0M in sales revenue. SDP anticipates FY 2018 funds carryover of approximately \$5.3M.

Vessel Sales Revenues

Accrued revenue from the sale of non-retention NDRF vessels over the past nine years (FY 2010-2018) has been approximately \$70 million for dismantling/recycling of 60 ships as shown in Table 4 below.

The volatility of the price of scrap steel and its impact on vessel sales is evident in data depicting the sale of vessels for recycling for FY's 2010-2018. The table indicates a trough of zero vessel sales in FY 2010, increasing to a peak of 19 vessels sold in FY 2013 with a slow slide to another trough of zero vessels sold in FY 2017. FY 2018 displays the resurgence in vessel sales with three sold in the fiscal year. In FY 2010, MARAD did not sell a single vessel for recycling but awarded service contracts for the recycling of 12 vessels. The price of scrap steel began rebounding in FY 2010, and from FY's 2011-2014 MARAD sold 51 ships and generated approximately \$61 million in revenue. Vessel sales again tapered off beginning in FY 2013 and by FY 2017 MARAD again did not sell any vessels for recycling. As vessel sales declined during FY 2013–2017 procurement of recycling services increased and in FY 2017 MARAD awarded 4 ship disposal service contracts. The decline in vessel sales for recycling in FY's 2015–2017 is directly attributable to the slowdown in domestic and international economic activity, reduced global demand for commodities, especially metals, and the subsequent collapse in the scrap metal markets. Conversely, the sale of three vessels in FY 2018 is attributable to the resurgence in domestic and international scraps steel prices, increased domestic economic activity and increased global demand for commodities.

The price of scrap steel has retreated from its high of \$379 per metric ton June of 2018 and by September 2018 had fallen back to \$302 per metric ton. MARAD remains optimistic a continuation of a positive domestic economic outlook will allow MARAD to continue vessel sales for recycling in FY 2019.

Vessel sales in FY 2018 credited approximately \$3.0M to the VORF. Accrued revenue from the sale of non-retention NDRF vessels over the past nine fiscal years (FY's 2010-2018) has been approximately \$70 million for the dismantling/recycling of 60 ships. Revenues from the sale of obsolete NDRF vessels are credited to the VORF account and do not supplement OSDP appropriations.

Table 4: Vessel Sales Revenue

Vessel Sales Revenue by Fiscal Year										
Fiscal Year	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	TOTAL
Annual Sales Revenue (\$):	\$0	\$7.6M	\$18.9M	\$24.6M	\$9.8M	\$6.1M	\$52K	\$0	\$3.0M	\$70M
Vessel Sales Contracts:	0	8	16	19	8	5	1	0	3	60
Vessel Service Contracts:	12	10	0	0	3	2	1	4	0	32
Total Recycling	12	18	16	19	11	7	2	4	3	92

For this chart vessel sale revenues are calculated using the vessel contract award date as the date of receipt of sale revenues in each fiscal year.

In FY 2018, MARAD issued two separate ship recycling sale announcements containing a total of three obsolete NDRF vessels. The rebound in scrap steel prices in FY's 2017-2018 provided a positive market for the sale of the three MARAD vessels. In addition, MARAD provided ship recycling services to the USCG via an economy act funds transfer for the dry-docking and recycling of two USCG owned buoy tenders located in the SBRF. The two vessels were small in size and weight such that there was insufficient recyclable metal, even at improved scrap steel prices, to cover the cost of towing from the SBRF, Panama Canal transit fees and remediation and recycling of hazardous materials on board the vessels. The rebound in scrap steel prices carried over into early FY 2019 and MARAD issued a sales announcement for an additional vessel in early October of 2018.

National Maritime Heritage Act

The FY 2017 NDAA amended Section 308704 of the NMHA, effective December 23, 2016, as follows;

(A) (VORF A) 50% shall be available to the Administrator of the Maritime Administration for such acquisition, maintenance, repair, reconditioning, or improvement of vessels in the National Defense Reserve Fleet.

(B) (VORF B) 25% percent shall be available to the Administrator of the Maritime Administration for the payment or reimbursement of expenses incurred by or on behalf of State Maritime Academies or the United States Merchant Marine Academy for facility and training ship maintenance, repair, and modernization, and for the purchase of simulators and fuel.

(C) (VORF C) 25%, the remainder, shall be available to the Secretary to carry out the Program.

(i) (VORF C1) 25% provided to the Secretary to carry out the NPS NMHGP.

- (ii) (VORF C2) *Set Aside* - Not less than 25% of the amounts available in (C)(i) each fiscal year for the NMHGP shall be used for preservation and presentation to the public of maritime heritage property of the Maritime Administration.¹⁰
- (iii) *Waiver*. The Maritime Administrator may waive the application of clause (i) for any fiscal year.

The set aside ensures MARAD will receive at a minimum 25 percent of the 25 percent (approximately 6.25 percent) of the funds allocated to the VORF C2 sub-account for the preservation and presentation to the public of MARAD’s maritime heritage property.

FY 2018 End of Year VORF Account Balances

MARAD created VORF sub-accounts patterned on the NMHA funding allocation requirements of Section 308704 to actively manage the ship recycling sale revenues credited into the VORF account. The FY 2017 end of FY balance of funds for the specified VORF sub-accounts is listed in Table 5.

Table 5: FY 2017 Fiscal Year End VORF Sub-Account Balances

Vessel Operating Revolving Fund	
Sub-Account Balances	
VORF A (NDRF)	\$2,476,705
VORF B (SMA's & USMMA)	\$2,404,138
VORF C1 (NPS)	\$456,981
VORF C2 (MARAD)	\$2,923,601
Suspense Account	\$0
Total	\$8,261,425

Amounts reflect fund totals as of September 30, 2017.

Ship Disposal Sales Revenue Retained – Suspense Account

Sales proceeds credited to the VORF account from ship recycling sales are only available for distribution under the funding provisions of the NMHA when the contracts under which those sales proceeds were received have been closed. Only at that time, is it clear that the sales proceeds, are no longer subject to claims by the recycling contractor. Recycling contractors can submit claims against the contract’s sales proceeds until the recycling contract is completed and the contract is closed. To ensure that sufficient funds are available if refund of all or a portion of the purchase price to the recycler is necessary, sales proceeds are placed into a VORF suspense sub-account until all contingent liabilities are extinguished. Once all contract contingent liabilities are satisfied the sales proceeds are distributed from the suspense account into the other appropriate VORF sub-accounts as per the funding requirements of the NMHA.

¹⁰ The intent of the amendment to the VORF C fund distribution is to designate the remaining 25% of available funds to the Secretary of the Interior for the NPS carry to out the NMHGP. Not less than 25% of the funds designated to the NPS are to be set aside for preservation and presentation to the public of maritime heritage property of the Maritime Administration.

VORF Obligations and Funds Provided

The suspense account balance at the beginning of FY 2018 was \$0 as prior year funds had been allocated to the various VORF sub-accounts by the end of FY 2017. In FY 2018, funds in the VORF totaling \$3,403,567 were allocated to the various VORF sub-accounts as per the NMHA distribution requirements. In FY 2018 sales revenue totaling \$3,030,862 was credited to the suspense account. None of these funds were available at the end of FY 2018 for allocation to the other VORF sub-accounts since the underlying ship recycling contract had not yet completed and potential liabilities and claims against the funds were yet extinguished. These funds will become available for allocation in FY 2019.

Table 6 provides a summary of the transactions within each VORF sub-account in FY 2018. The Balance column is the funds available in each sub-account at the beginning of FY 2018. The Funds Available column provides the total funds available in each sub-account during the fiscal year.

Table 6: FY 2018 VORF Sub-Account Summary of Internal Transactions

VORF Sub-Account Summary of Internal Transactions					
Beginning Balance, Allocations, Credits, Recoveries					
Sub-Accounts	Balance	Allocations	Credits	Recovery	Funds Available
VORF A (NDRF)	\$2,476,705	(\$1,490,372)	\$0	\$73,232	\$1,059,565
VORF B (SMA's & USMMA)	\$2,404,138	(\$1,680,000)	\$0	\$0	\$724,138
VORF C1 (NPS)	\$456,981	\$0	\$0	\$0	\$456,981
VORF C2 (MARAD)	\$2,923,601	(\$233,192)	\$0	\$0	\$2,690,409
Suspense Account	\$0	\$0	\$3,030,862	\$0	\$3,030,862
Total	\$8,261,425	(\$3,403,564)	\$3,030,862	\$73,232	\$7,961,955

- **Suspense Account:** Funds totaling \$3,030,862 were credited to the VORF suspense account from the sale for recycling of three NDRF non-retention vessels. These funds were not available for distribution to the other sub-accounts in FY 2018 as the underlying ship recycling sales contracts were still in progress and not yet completed.
- **VORF A:** In accordance with the 50% funding allocation required by the NMHA, the following transactions occurred in this sub account:
 - Funds in the amount of \$1,490,372 were obligated to enumerated projects for vessels in the NDRF.
 - Funds in the amount of \$73,232 were recovered from prior year contract closeout actions.
- **VORF B:** In accordance with the 25% funding allocation required by the NMHA, the following transactions occurred in this sub account:
 - Funds in the amount of \$1,680,000 were allocated to the State Maritime Academies and United States Merchant Marine Academy.
- **VORF C1:** In accordance with the 25% funding allocation required by the NMHA, the following transactions occurred in this sub account:
 - No funds were allocated from the VORF C1 sub-account to the NPS in FY 2018.

- **VORF C2:** In accordance with the 25% funding allocation required by the NMHA in which 25% of this 25% (6.25%) is set aside for the Maritime Administration, the following transactions occurred in this sub account:
 - Funds in the amount of \$233,192 were obligated for various projects for the preservation and presentation to the public of maritime heritage property of the Maritime Administration.

Table 7 provides a summary of funds obligated, distributed or made available to each of the NMHA Program recipients from funds available in the VORF sub-accounts for FY 2018. The FY 2018 ending balance represents the funds available at the beginning of FY 2019.

Table 7: FY 2018 VORF Program Obligations, End of Fiscal Year Balance

VORF Sub-Account Summary of Obligations			
Funds Available, Obligations, Final Fiscal Year Balance			
Sub-Accounts	Funds Available	Obligations*	FY 18 Ending Balance
VORF A (NDRF)	\$2,476,705	(\$1,417,140)	\$1,059,565
VORF B (SMA's & USMMA)	\$2,404,138	(\$1,680,000)	\$724,138
VORF C1 (NPS)	\$456,981	\$0	\$456,981
VORF C2 (MARAD)	\$2,923,601	(\$233,192)	\$2,690,409
Suspense Account /1	\$0	\$0	\$0
Total	\$8,261,425	(\$3,330,332)	\$4,931,093

* Includes prior year recoveries and de-obligations.

/1 Does not include funds credited into the suspense account as they were not available for allocation in FY 2018.

VORF FY 2018 Sub-Account Activity

VORF A: NDRF Projects

Fifty percent of the funds credited into the VORF shall be available to the Administrator of the Maritime Administration for such acquisition, maintenance, repair, reconditioning, or improvement of vessels in the NDRF. Funds obligated in FY 2018 totaled \$1,490,372 for the following NDRF projects.

Project	Description	Funding
Lifeboat Installation	Increase cost for installation of Safety-Lifeboat on Fast Sealift Ship Bellatrix	\$75,000
Annual Maintenance	Perform annual maintenance repairs and regulatory drydock on the M/V Freedom Star	\$1,294,622
Habitability Repairs	Accomplish U.S. Marine Corp habitability repairs on the SS Wright	\$120,750
Total Funds		\$1,490,372

Table 8 provides a summary of the FY distributions from the VORF A sub-account for FY's 2009-2018.

Table 8: VORF A Fund Distributions FY 2009 - 2018

VORF A Distributions to the NDRF by Fiscal Year											
	FY-2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Summary
VORF - A	\$1.5M	\$1.7M	\$1.0M	\$2.2M	\$5.3M	\$7.5M	\$10.5M	\$798K	\$5.9M	\$1.5M	\$37.9M

VORF B: USMMA and SMA's

Twenty-five percent of the funds credited to the VORF are made available to the United States Merchant Marine Academy and the six State Maritime Schools. In FY 2018, a total of \$1,680,000 was obligated to the Maritime Academies. Amounts to the individual schools are listed in the table below.

Academy	Funds
U.S. Merchant Marine	\$750,000
Maine Maritime	\$155,000
Massachusetts Maritime	\$155,000
Great Lakes Maritime	\$155,000
Texas A&M Maritime	\$155,000
California Maritime	\$155,000
SUNY Maritime	\$155,000
Total Funds	\$1,680,000

Table 9 provides a summary of the funds distributed to the USMMA and State Maritime Academies for FY's 2009–2018.

Table 9: VORF B Funds Distributed to the Maritime Academies FY 2009 – 2018

VORF Distributions to the USMMA and State Maritime Academies by Fiscal Year											
ACADEMY	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	SUMMARY
USMMA	\$444,561	\$188,143	\$147,959	\$962,000	\$0	\$0	\$1,600,000	\$0	\$69,241	\$750,000	\$4,161,904
Maine	\$300,000	\$0	\$60,537	\$940,056	\$0	\$1,000,000	\$0	\$0	\$120,000	\$155,000	\$2,575,593
Mass	\$300,000	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$0	\$0	\$120,000	\$155,000	\$2,535,236
Great Lakes	\$50,000	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$0	\$0	\$120,000	\$155,000	\$2,285,236
Texas	\$0	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$0	\$0	\$120,000	\$155,000	\$2,235,236
California	\$450,000	\$0	\$131,165	\$940,056	\$0	\$1,000,000	\$0	\$0	\$120,000	\$155,000	\$2,796,221
SUNY	\$300,000	\$0	\$131,165	\$940,056	\$0	\$1,000,000	\$0	\$0	\$120,000	\$155,000	\$2,646,221
Annual Total	\$1,844,561	\$188,143	\$531,366	\$6,602,333	\$0	\$6,000,000	\$1,600,000	\$0	\$789,241	\$1,680,000	\$19,235,644

VORF C: Maritime Heritage

Twenty-five percent of the funds credited to the VORF shall be used for maritime heritage property preservation and presentation. Funds are made available to the Secretary of the Interior to carry out the NPS's National Maritime Heritage Grant Program (NMHGP) (VORF C1) with not less than 25% of the funds designated to the NPS set aside for preservation and presentation to the public of maritime heritage property of the Maritime Administration.

VORF C1: National Park Service NMHGP

No funds were provided by MARAD to the NPS in FY 2018 to support maritime heritage projects selected by the NPS in the National Maritime Heritage Grant Program (NMHGP).¹¹ The NPS 2017 Grant Program and Application Information can be found at <https://www.nps.gov/maritime/grants/apply.htm>.

VORF C2: MARAD Maritime Heritage

In FY 2018, MARAD obligated \$233,192 for newly approved projects for the preservation and presentation to the public of MARAD's maritime heritage property. Overall MARAD expended \$820,640 in FY 2018 for ongoing projects for the preservation and presentation to the public of MARAD's maritime heritage property. These funds include amounts on open contracts from prior year obligations. Project durations and funding obligations span multiple FYs.

Suspense Account: The balance in the suspense account at the beginning of FY 2018 was \$0. Sales proceeds collected and credited into the VORF suspense account in 2018 totaled \$3,030,862. These funds will be distributed to the other VORF sub-accounts as per the NMHA allocation requirements, once contingent liabilities have been extinguished for each underlying sales contract.

MARAD Maritime Heritage Projects

Table 10 presents a list of each project selected by the Maritime Administrator, for preservation and presentation to the public of MARAD's maritime heritage property, for which funds from the VORF C2 sub-account were expended in FY 2018.

¹¹ MARAD transferred \$5M to the NPS in FY 2017 in support of the 2017 grant application process. The NPS did not request any additional funds in FY 2018.

Table 10: FY 2018 MARAD Maritime Heritage Projects

FY 2018 VORF C2 Funds Expenditures		
Project	Description	Expended Funds
VORF C2 (HQ)	MARAD FY 2018 Maritime Heritage Projects	
1	Vessel History Database- Contract support to research and document MARAD’s activities in wars, major conflicts, and humanitarian assistance. Vessel history database normalization; historical research and documentation of MARAD-owned shipwrecks for NHPA Section 110 compliance.	\$178,218
2	Conservation of MARAD heritage assets at Cheatham Annex.	\$224,780
3	Contract support to complete work at Cheatham Annex to secure and preserve MARAD heritage assets removed from WWII-era and later vessels.	\$331
4	National Park Service Historic American Engineering Record (HAER) surveys NSS HAER Supplemental Recordation Project.	\$108,762
5	Repair of damaged ship models.	\$7,637
6	Administrator’s Blue-Ribbon Commission Travel to American Merchant Marine Museum.	\$4,550
7	IAA Volpe Savannah Heritage Projects NSS Electrical Power Survey Phase 2 (complete)/ NSS Replace 120 Volt Transformers (complete)/ NSS Fire Hazard Analysis (complete)/ NSS Marine Engineering and Drafting (completed revisions to Fire Control Plan and other record drawings).	\$79,294
8	NSS National Historic Preservation Act Heritage Projects.	\$176,532
9	NSS Nuclear Historian Consultation - General support for Section 106 consultation efforts.	\$540
10	NSS Nuclear Historian Consultation – Development of thematic assessment and mitigation plans to support Programmatic Agreement for NHPA Section 106/110 compliance.	\$15,700
11	Scanning of historically significant documents, drawings and plans.	\$20,408
12	Travel, administrative, and other miscellaneous expenses to managed MARAD’s Maritime History and Heritage Program. (2018)	\$3,888
	Total Expended Funds	\$820,640

Table 11 provides a summary of the FY distributions for FY's 2009-2018 from the VORF C2 sub-account to the NPS for the NMHG program and to MARAD for preservation and presentation to the public of MARAD's maritime heritage property.

Table 11: VORF C Funds Provided for Maritime Heritage FY 2009 - 2018

VORF Distributions to the NPS and MARAD by Fiscal Year											
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Summary
VORF - C1 NPS	\$0	\$0	\$0	\$0	\$0	\$2.0M	\$2.8M	\$968K	\$5.0M	\$0.00	\$10.8M
VORF - C2 HQ	\$0	\$0	\$176K	\$200K	\$410K	\$246K	\$498K	\$3.3M	\$368K	\$233K	\$5.4M
Annual Total	\$0	\$0	\$176K	\$200K	\$410K	\$2.2M	\$3.3M	\$4.3M	\$5.4M	\$232K	\$16.2M

Amounts reflect funds obligated for contract actions through FY 2018.

Fiscal Year 2019 Planned Disposal Activities

In October 2017, MARAD downgraded two vessels to non-retention status, the CAPE AVINOF located in the JRRF and the CHESAPEAKE, located in the BRF bringing to 13 the total number of MARAD non-retention vessels awaiting disposal at the beginning of FY 2018. In FY 2018, two vessels were upgraded from non-retention to retention status, the CHESAPEAKE and the CAPE AVINOF. Both vessels were removed from the list of vessels available for disposal. In addition, in FY 2018 MARAD awarded three vessels for disposal leaving eight vessels available for disposal at the end of FY 2018. MARAD does not anticipate downgrading any retention vessels to non-retention in FY 2019 thus the number of vessels available for disposal is not expected to increase during the fiscal year.

At the start of FY 2019, MARAD had eight non-retention vessels in two NDRF fleet sites and three vessels located at the NISMO facility in Philadelphia, PA, in the disposal queue. No MARAD vessels were available for disposal from the SBRF in FY 2018. MARAD did award for disposal two USCG owned vessels, IRIS and PLANETREE located in the SBRF. The three Navy vessels are not readily available for disposal until such time as the Navy completes a programmatic environmental assessment or consultation and/or receives specific permission from the NMFS to remove the vessels for disposal.

The goal for FY 2019 is to focus on the disposal of the worst conditioned vessels from the JRRF and BRF through competitive vessel sales or the procurement of recycling services.

Five-Year Disposal Program Projections

With the number of non-retention vessels in inventory and awaiting disposal at a historic low, it is anticipated that the number of vessels removed for disposal annually over the next five years will average less than four per year. Vessel downgrade projections are estimated due to the numerous variables, beyond the control of the SDP, that affect the availability of additional ships for disposal, such as, the timetable for downgrading vessels to non-retention status, holding vessels for the logistic support of existing RRF vessels and completion of the NHPA Section 106 historic assessment process. Since 2007, the backlog of obsolete MARAD ships that accumulated in the 1990s has been steadily eliminated to the point that no more than 10 total vessels are likely to be in non-retention status in any given year for the foreseeable future. Table 12 provides a five-year projection of MARAD non-retention vessel disposals by FY. The projections include Government owned merchant type vessels greater than 1,500 gross tons as reported from other Government agencies.

Table 12: Vessel Disposal Projections FY's 2018 – 2022

Vessel Disposal Projections by Fiscal Year					
Fiscal Year	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Number of Vessels	3-4	3-5	3-5	3-5	3-5

As a result of the decreasing number of obsolete vessels available for disposal and the absence of any high disposal priority ships in poor material condition, MARAD's annual target for vessel removals has decreased. MARAD anticipates the disposal of an average of 3-4 vessels in FY 2019 with the disposal of 3-5 vessels in FY's 2020-2023.

The Five-Year Vessel Retirement projections from Figure E indicate there will be a total of 22 vessels retired in the next five years, 4 by the US Navy, Active Vessels, 9 by the US Military Sealift Command, 8 by MARAD and 1 by NOAA. Unclear is when exactly each of these vessels will be placed for recycling. Only two MSC vessels will be retired in FY 2019, none by the Navy or MARAD. Complicating vessel disposal planning is the ongoing NAVY/NMFS consultation over an environmental biological programmatic assessment for the disposal of Navy inactive ships and the litigation by the Squamish Indian Tribe in concert with the Washington Environmental Council and the Puget Soundkeeper Alliance for alleged clean water act violations. As of this report these consultations have stopped all Navy Inactive ship disposal activities including the sale for recycling of Navy non-combatant ships by MARAD, the transfer of non-combatant Navy vessels to MARAD fleet anchorages and the sale of combatant vessels for recycling by DLA.

Should MARAD remove three vessels for recycling in FY 2019 as planned there will only be five vessels in the MARAD disposal queue at the beginning of FY 2020.

Ship Disposal Program Performance Measures

The Program's annual performance measures of vessels awarded, vessels removed and vessels disposed are the most direct measure of progress in disposing of obsolete ships and meeting the Agency environmental stewardship targets. MARAD's focus had been on expedited removal for disposal of SBRF vessels, and the added requirement of dry-docking SBRF non-retention ships, performance measures and goals previously developed have been modified to reflect the terms of the Consent Decree related to the removal and dry-docking of SBRF vessels. With the completion of the removal of the 57 SBRF non-retention vessels under the Consent Decree and no SBRF non-retention vessels in the disposal queue MARAD will focus on the removal of the worst conditioned vessels in the JRRF and BRF.

The Agency's ability to meet future performance targets is based on factors including, but not limited to, the following:

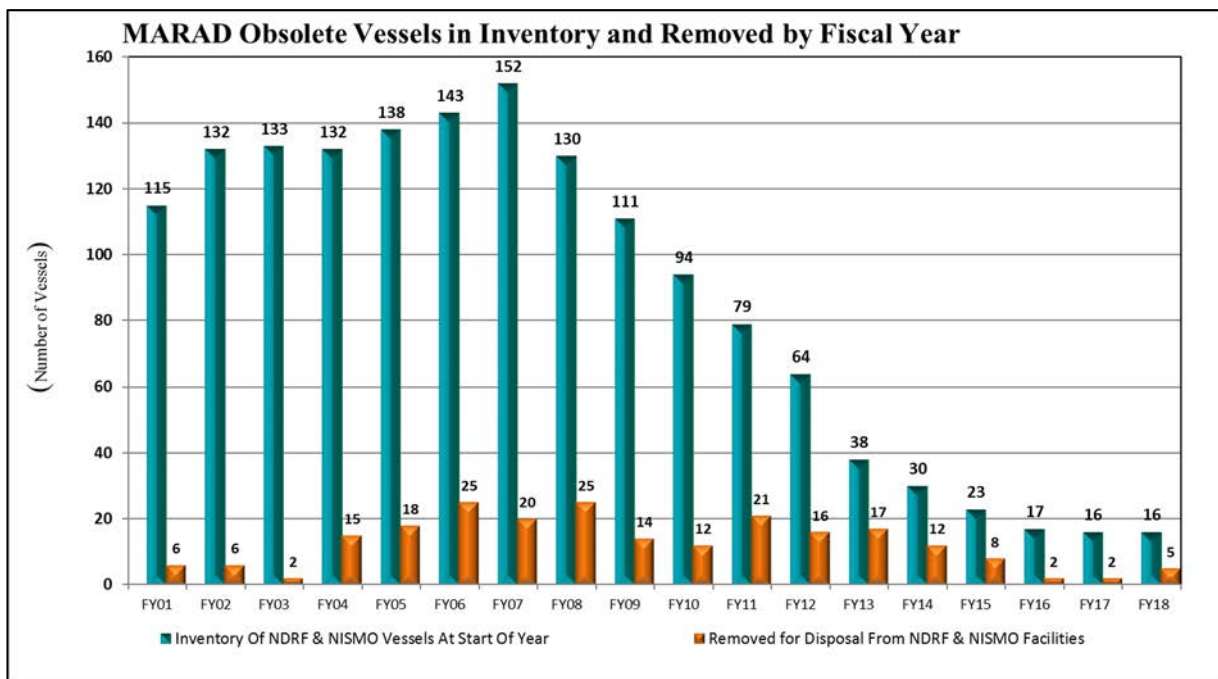
- Timing and amount of annual appropriations.
- The availability of competitive recycling facilities with available capacity and adequate production throughput.
- Feasibility of disposal options available to the Program.
- Dry-dock availability, throughput and cost (SBRF ships only).
- Availability of commercial towing assets and associated fuel costs.

- The costs of aquatic nuisance species sampling, assessment, and threat mitigation, including the dry-docking of SBRF ships for the removal of marine growth on the hulls.
- The costs of environmental remediation of hazmat streams such as asbestos, PCB and loose exterior paint present on the obsolete non-retention vessels.
- The market price of recyclable steel.

Negative trends in any one or a combination of those variables are beyond the Agency’s control and can significantly affect meeting the performance targets. The targets for each year are established during the annual President’s Budget Request development process 18 months prior to the specified budget year.

The most direct measure of the Program’s performance is the annual target for vessel removals. Figure G below is a graph of the number of obsolete NDRF vessels in the disposal inventory at the start of each FY and the number of obsolete non-retention vessels removed for each FY from FY 2001 through September of 2018.

Figure G: Obsolete Vessels in Inventory/Removals by Fiscal Year



As shown in Figure H, MARAD has exceeded the ship removal target by an average of 3.0 vessels per year over the 18-year period; missing the annual target in only five years. It is interesting to note that from FY’s 2001–2013 the annual vessel removal target was not achieved in only one year, 2003. This 13-year period coincided with a large number of non-retention vessels in inventory needing to be disposed, sufficient qualified ship recycling capacity, and large appropriations which averaged \$12.3M per year. Sufficient appropriations allowed the program to award service contracts by which to balance the poor vessel sales years of FY’s 2001–2007. Between FY’s 2008-2013 vessel sales increased and outpaced service contracts. During this period vessel sales aided the program in allowing adequate appropriations and carryover funds to be applied to the dry-docking and recycling of the SBRF vessels under the California Court Consent Decree.

MARAD did not meet its annual vessel removal targets from FY's 2014-2016. This period coincides with the collapse of the domestic scrap steel market, reduction in ship recycling capacity, Navy aircraft carrier and DLA ship dismantlement awards and the prominent reduction in ship disposal annual appropriations, which averaged approximately \$2.0M during the three fiscal years.

In FY 2014, the decrease in domestic recycling capacity available to MARAD, a decrease in competition for MARAD recycling contracts and the length of recycling acquisition cycles resulted in 12 actual ship removals, three short of the removal target.

In FY 2015, the decrease in domestic recycling capacity available to MARAD, a decrease in competition for MARAD recycling contracts, the plunge in the price of recycled steel prices and the lack of vessel sales resulted in eight actual ship removals, two short of the removal target.

In FY 2016, MARAD faced the same factors as in the previous year but was further impeded due to limited appropriations. The result was the removal of only two vessels in FY 2016, four short of the removal target.

In FY 2017, MARAD again faced continued lower prices for scrap steel, late appropriations sufficient to remove the last two SBRF Consent Decree vessels requiring dry-docking and long tows. As a result, MARAD sold no vessels for recycling and fell four vessels short of the FY 2017 removal target.

In FY 2018, MARAD benefited from the increase in scrap steel prices and sold three vessels for recycling. A total of five vessels departed for recycling from the MARAD fleet sites in FY 2018 two more than the removal target.

Figure H: Vessel Removal Projections Compared to Actual Vessel Removals

Vessel Removal Projections Compared to Actual Vessel Removals																			
Non-retention <u>vessels removed</u> annually from MARAD NDRF and Navy NISMF sites.																			
<u>FY</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	Actuals (Thru FY2018)
Target:	3	3	4	4	15	13	13	16	14	10	10	12	15	15	10	6	6	3	172
Actual:	6	6	2	15	18	25	20	25	14	12	21	16	17	12	8	2	2	5	226
																			(Δ +54)

The differential (Δ) between the targets and actual results for vessel removals over the last 18 years shows that all annual targets have been met or exceeded except for five years. The targets that were not met in FY's 2014-2017 corresponded to the worst collapse in the scrap steel markets since 2001. The cumulative Δ between targets and actual over the same period is significant and indicative of the Program's overall progress and effectiveness despite the environmental and legal challenges faced.

Environmental Regulation and Related Legal Challenges

The challenges related to the NISA and the CWA compliance requires appropriate financial resources to mitigate invasive species impact to the environment. The Agency is complying with the USCG's application of NISA and its regulations in administering ship disposal activities in order to protect the environment. The USCG and MARAD reached an agreement to accomplish in-water hull cleaning (commonly known as "scamping") to remove soft aquatic growth prior to towing the non-retention vessels from the fleets to recycling. NDRF vessels are cleaned waterborne in Texas and Virginia prior to transit for recycling in Texas and Louisiana. Vessels must depart the fleet locations within 14 days after completion of the hull cleaning to prevent new growth on the underwater hull. Waterborne marine growth mitigation costs have ranged from \$75-150 thousand per ship and reduce sales revenues when the recyclers procure the service. MARAD qualifies commercial diving companies capable of performing waterborne hull cleaning while the Navy utilizes their own contractor. Availability of the diving companies has the potential to impact the rate of vessel removals from the fleets.

For ships in the SBRF, MARAD will continue to perform cleaning in dry-dock because of concerns related to possible paint discharges. California allows in-water hull cleaning of active RRF vessels in San Francisco Bay waters with an approved discharge capture method. However, because of unique concerns regarding specific aquatic species in Texas and Louisiana, MARAD currently continues to clean SBRF vessels destined for recycling in those two States in dry-dock. Due to these concerns, the cleaned SBRF vessels must also be removed from San Francisco Bay waters within 14 days after undocking. The requirement to dry-dock SBRF ships in California to clean underwater hulls of marine growth before departure has cost an average of approximately \$500K per ship. The availability of dry-docks has been limited to one or two companies over the years and for the shipyards, MARAD vessels are low priority after commercial and US military vessels. Further, mobilizing towing assets to remove the vessels after dry-docking within the prescribed timeframe is subject to their availability.

In January 2017, BAE Systems San Francisco Ship Repair, sold its shipyard operations to Puglia Engineering, Inc., a Tacoma, WA based ship repair company. Shortly after the sale the condition of the shipyard's two dry-docks led Puglia to sue BAE Systems for misrepresentation. Puglia decided to close the facility in May 2017 rather than invest additional funds to repair the dry-docks. At the end of FY 2018 the shipyard facility had not re-opened. At this time, there are no non-retention vessels located in the SBRF. However, MARAD does have retention vessels in the SBRF that in the future will be available for disposal. The closing of the Puglia Shipyard in San Francisco leaves Mare Island DryDock as the sole remaining full service shipyard available to dry-dock future SBRF vessels slated for disposal.

II. N.S. SAVANNAH

The NSS is a legacy asset maintained by MARAD. MARAD is responsible for NSS because it is the agency that built and operated it under statutory authority enacted in 1956. The NSS was defueled and has been inoperable since the mid-1970's however, it's nuclear power plant is substantially intact, and remains subject to licensing and inspection by the NRC. MARAD is a Federal licensee as defined in the Atomic Energy Act of 1954, as amended (and implementing regulations at 10 CFR 50), and is responsible for the asset until the license is terminated through decommissioning. To meet its obligations under the license, MARAD maintains a proficient and competent nuclear capability and licensee organization. That organization, known as the Savannah Technical Staff (STS), is located within the OSDP since the MARAD reorganization of 2007. The STS is a blended organization composed of organic MARAD staff, contractors, and government partner organizations with decommissioning expertise. The organization and the NSS are unique to MARAD and the Department of Transportation (DOT).

Licensed Activities

The NRC license to possess but not operate or dismantle the nuclear facilities installed onboard the ship is the overarching regulatory authority applicable to the NSS¹². The license is not limited to the discrete compartments onboard the ship in which nuclear equipment and systems are located; rather, it covers the entire envelope of the ship. The ship itself, whether mobile or stationary, is the licensed site boundary and serves as the primary physical structure to protect the safety and health of the public and environment. Similar to a landside nuclear power plant, all activities within the site boundary (i.e., onboard the ship) are conducted under the authority of the NRC license, and are referred to as licensed activities. There are three major components to the licensed activities program; radiological protection, nuclear compliance; and ship husbandry/custodial care. MARAD employs a single technical support contractor to provide integrated services in these areas.

Radiological Protection (RP) programs are prescribed by the NRC and are designed to protect workers and visitors (where visitor refers to anyone not trained and qualified as a radiation worker) from the harmful effects of exposure to man-made radiation. The RP program employed onboard the NSS is designed for the site-specific conditions unique to NSS and fully considers the plant's shutdown condition. Comparable programs are maintained at all other shutdown commercial nuclear power plants in the U. S.

Nuclear compliance, sometimes referred to by MARAD as "license technical support" involves the core nuclear skills, disciplines and expertise that establish the institutional competency to manage a nuclear facility. This is the nuclear analog to the comprehensive maritime expertise that MARAD naturally possesses by virtue of its ship owning and ship operations activities. Neither MARAD nor DOT own or maintain any other nuclear power facility; consequently, the specialized nuclear compliance services are critical to MARAD's continued satisfactory performance as a NRC-licensee. Ship husbandry and custodial care services are necessary to

¹² In June 2018, the NRC issued license amendment 15 which approved MARAD's request to revise the NSS Facility Operating License NS-1 to remove the license prohibition on dismantling and disposal of the NSS nuclear facilities to reflect commencement of preliminary dismantling activities in preparation for full scale decommissioning.

maintain and safeguard the ship as the aforementioned primary physical structure of the licensed site. These services are well-within MARAD's normal core competencies.

Licensed activities include administrative programs and a broad spectrum of surveillance, and monitoring actions, preventative maintenance, and radiological and environmental surveys. The comprehensive program is designed to meet the minimum statutory and regulatory obligations imposed by the continued retention of the vessel in protective storage. Detailed annual reports are submitted to the NRC and are publicly available.

MARAD oversight of the STS program is exercised through the organizational line of authority, and also through an Executive Steering Committee (ESC). Appropriated funds are sourced annually in the Ship Disposal Appropriation, with immediate oversight of funds management exercised by the Director, Office of Ship Disposal. The ESC is composed of agency senior civilian management, reporting to the Maritime Administrator. The ESC meets at least annually, and provides a mechanism by which the licensee staff can provide input to, and receive guidance and direction from agency leadership. The STS program manager is the designated licensee, and represents the agency in all matters before the NRC.

Stewardship

The NSS is a Federally-owed National Historic Landmark (NHL). It was designated as a NHL in 1991, and is the only directly-owned, managed and maintained NHL property in the Department of Transportation inventory.¹³ Under the provisions of the National Historic Preservation Act (NHPA) of 1966, as amended, the highest standard of care for historic objects falls upon Federal owners of NHLs. Consequently, MARAD maintains an appropriate historic stewardship program for the NSS. With due care and thoughtful planning, MARAD is able to seamlessly integrate stewardship into our licensed activities, and avoid direct costs or similar burdens that might otherwise accrue if stewardship obligations were managed separately.

The NSS stewardship obligations are not the sole responsibility of MARAD. Decommissioning and license termination are future Federal undertakings in which the NRC has an equal obligation. The NRC license is the authority under which decommissioning will be performed, and under the provisions of the NHPA, that Federal license to require and permit the undertaking imposes planning and mitigation obligations on the issuing-agency that are effectively equal to those imposed on MARAD as the owner of an NHL. Also, important to note is that decommissioning and license termination will not negate the ship's NHL status, and is not intended to result in the immediate disposal of the ship itself. MARAD will retain some measure of stewardship responsibilities post-decommissioning, unless a seamless disposition objective is determined and a plan is developed and implemented during the decommissioning process. Otherwise, stewardship obligations will remain until an independent disposition action is taken post-license termination. All disposition efforts will be considered through the NHPA Section 106 consultative process.

¹³ Washington Union Station is owned by the DOT, acting through the Federal Railroad Administration. The station complex, including air rights above the tracks, is managed and maintained by the independent Union Station Redevelopment Corporation, a public-private quasi-governmental entity established in 1983.

Status of the Facility during FY 2018

During FY 2018, the NSS was berthed at Pier 13, Canton Marine Terminal, and 4601 Newgate Avenue, Baltimore, MD. The removal by the NRC of the license condition prohibiting dismantlement changed the status of the NSS facility from “Mothballed” to “Dismantlement.” Dismantlement is characterized by removal of radioactive fluids, radioactive wastes and other materials having activities above accepted unrestricted activity levels. Mothballed (referred to herein as Protective Storage) activities continue to be performed. These include active surveillance, monitoring and maintenance of the nuclear facilities housed onboard the ship, and custody and maintenance of the ship as the primary physical boundary and protective barrier of the licensed site.

The Consolidated Appropriations Act for FY 2018, enacted on March 23, 2018 provided \$107 million to MARAD for NSS decommissioning. This amount combined with the \$24 million provided by the Consolidated Appropriations Act for FY 2017 equals the \$131 million estimated to complete decommissioning and terminate the NSS license.

Protective Storage

MARAD’s contemporary protective storage program is compliant with NRC regulations and guidelines, and is comparable to the SAFSTOR programs at all other domestic, permanently-shutdown and defueled commercial nuclear power plants. The current NRC regulations and guidelines define protective storage under the title “SAFSTOR”, and require active processes, programs and procedures that are fundamentally equivalent to those present in an operating plant. The work associated with these processes, programs and procedures is reduced in scope based on the defueled and inoperable condition of the facility, but may not be eliminated. These same processes, programs and procedures are employed in the dismantlement phase of decommissioning, again, with workloads adjusted to match the demands of the decommissioning activities. In addition to these administrative actions, equipment and systems necessary for future decommissioning must be maintained during the protective storage period. NSS-specific examples include but are not limited to, ventilation, electrical lighting and distribution, alarm systems and access controls, ballast systems for list and trim control (presently inoperable), active (versus passive) radiological monitoring (presently inoperable), and mooring equipment. Safety-related systems, structures and components are maintained as described in the ship’s Quality Classification List.

MARAD’s protective storage program for the NSS combines contemporary nuclear expertise with modified marine best practices drawn from our extensive experience maintaining ships in reduced states of readiness. The NSS has been at the Baltimore location since May 2008. The Baltimore layberth is an accessible location that permits the protective storage program to be carried out most efficiently, and at lower cost. The vessel is routinely occupied by workers and staff to carry out the licensed activities program. The integrated technical support contract was developed to maximize the effective use of available resources with the ship in this, or a similar, lay-berthing location.

NSS protective storage activities continue at the baseline level of effort for NRC license compliance concurrent with decommissioning activities and termination of the ship’s NRC license. Upon termination of the NRC license the protective storage program will be brought to an orderly conclusion.

Decommissioning and License Termination

Decommissioning is the process by which a nuclear power plant is safely removed from service, and residual radioactivity is reduced to a level that permits termination of its license.

Decommissioning in the US is a mature process both from the technological and regulatory standpoints. Twelve commercial nuclear power plants, and multiple government facilities have been decommissioned within the past 25 years and this experience bears on the NSS project.

The NSS nuclear power plant is substantially intact, although defueled and permanently inoperable. MARAD will supplement its Environmental Assessment prepared in 2008 for decommissioning of the NSS to analyze the environmental impacts of the various alternatives related to the decommissioning process. One of the decommissioning and licensed termination alternatives to be analyzed is NRC DECON methodology. The approach envisions utilizing ship structures and interior volume to the maximum extent possible to keep activities within the site boundary. This closely aligns with landside commercial nuclear decommissioning's, which are the direct analog to NSS. As with landside plants, decommissioning contractors will mobilize to the NSS site to perform work. A shipyard is not required for this effort.

MARAD's decommissioning project is structured in three major phases spanning a seven-year time period, where the scope of each phase is roughly defined by its name. Phase I is a two-year period of engineering and planning, combined with minor dismantlement activities to nuclear systems and components in outlying areas of the ship. Phase I includes the licensing actions necessary to support the subsequent heavy industrial dismantlement that takes place in Phase II. Phase II is estimated to require as much as four years and is the heavy engineering and industrial activities necessary to complete radiological remediation and dismantlement of the nuclear systems, structures and components. Phase III is License Termination, with a duration of about one year wherein the NRC conducts independent confirmatory surveys and inspections.

Based on commercial decommissioning experiences, MARAD developed a project approach that utilizes ship structures and interior volume to the maximum extent possible to keep activities within the site boundary. This conservative approach closely aligns with the methodologies employed by landside plants; as with those plants, decommissioning contractors will mobilize to the NSS site to perform work. A shipyard is not required for the effort.

As noted in previous sections of this report, funding was appropriated in both FY 17 and FY 18, with the total amount of \$131 million equal to the projected decommissioning requirement. Given the late availability of the FY 17 funds (mid-4th Qtr), MARAD formerly implemented its decommissioning project at the outset of FY 18. MARAD employed its existing integrated management contractor to execute the work. MARAD expects the existing contractor to work through the completion of Phase I. The acquisition of subsequent decommissioning services will take place in FY 2019.

FY 2018 Significant NSS Activities

Significant activities may be grouped into two major subject areas; regulatory compliance, and decommissioning support. In the regulatory compliance area, MARAD submitted three license amendments to the NRC (two of which were issued during the FY reporting period); initiated

and developed a Supplemental Environmental Assessment (EA) to address NEPA requirements not included in MARAD's 2008 EA (incomplete at the end of the FY reporting period); and initiated consultation under Section 106 of the NHPA (formal consultation efforts began in November 2018, after the end of the reporting period).

Decommissioning support activities include both tangible work, and engineering and planning efforts. In late FY 2017, MARAD awarded a Technical Support and Integrated Services (TSIM) contract to Tote Services, Inc. The purpose of the contract is to provide nuclear proficiencies and technical competencies for radiological protection, license technical support and ship husbandry services as required by the NRC to maintain the NSS in protective storage. Protective storage is characterized by maintenance of an appropriate radiological protection program to safeguard workers and the environment; active surveillance, monitoring and maintenance of the nuclear facilities housed onboard the ship; and custody, staffing, and maintenance (together referred to as husbandry) of the ship as the primary physical boundary and protective barrier of the licensed site.

The following significant discrete tangible work activities were performed in FY 2018:

- Completed access improvements to the Containment Vessel (CV). The modification created the new D Deck CV entrance on D deck starboard at Frame 112. The entrance is a watertight double door.
- Completed access improvements between the D Deck CV entrance and Cargo Hold 4 at C and D decks by installing watertight double doors.
- Removed primary and auxiliary system components that interfered with installing the new D Deck CV entrance.
- Installed an interim HEPA ventilation system for the CV, Reactor Compartment and Cold Chemistry Laboratory.
- Removed asbestos in numerous spaces in preparation for characterization and dismantlement.
- Abated lead in numerous areas in preparation for characterization and dismantlement.
- Removed radiologically contaminated drains in the A Deck Health Physics Laboratory and Hot Chemistry Laboratory. Both spaces were fully decommissioned and de-posted as Radiologically Controlled Areas during the FY.
- Removed numerous legacy fire hazards from Cargo Holds 2, 3 and 4.

Engineering and planning activities concentrated on supporting the above tangible work, with significant efforts devoted to the design and installation of the interim ventilation system, and the major design-build of the CV horizontal access portal. To support radiological and environmental remediation planning, characterization surveys were completed throughout the vessel during FY 2018. Additional characterization within the reactor compartment itself will be completed during FY 2019.

In the environment of continuing budget resolutions, the minimum requirements for radiological protection and ship husbandry were met, including annual underwater inspection of the hull, classification surveys and inspections, and radiological surveillance and monitoring. The program of incremental safety improvements was continued, with emphasis on emergency egress points.

In May, the Consolidated Appropriations Act for FY 2017 provided \$24M for decommissioning activities. The Act also provided the full request of \$3M for annual protective storage activities. Apportionments were not available until mid-June, at which time the balance of protective storage funding was obligated to the existing service contracts for lay-berthing and integrated technical support. An obligation of \$2M was made to the technical support contractor for initial decommissioning activities analyzed under the 2008 EA. The contractor's augmented staffing was put in place near the end of the 4th Qtr, such that performance of decommissioning activities began in FY 2018. Those activities will be described in the FY 2018 Annual Report.

III. BIENNIAL SHIP DISPOSAL PROGRAM ASSESSMENT SUMMARY: INTERIM FY 2018

Overview

In accordance with 40 U.S.C. § 548, MARAD shall dispose of surplus vessels of 1,500 gross tons or more that the Administration determines to be merchant-type vessels or capable of conversion to merchant use.¹⁴ By this statute, MARAD is the exclusive disposal agent for all federally owned merchant-type obsolete vessels greater than 1,500 gross tons. These include obsolete merchant ships moored at NDRF sites that, while part of the NDRF, are not assigned to the RRF, or otherwise designated for a specific purpose. It includes merchant-type vessels owned by other Federal Agencies that meet the statutory gross tonnage threshold. When ships are determined to be no longer useful for defense or humanitarian relief missions, the SDP arranges for their responsible disposal on a worst-first basis at domestically qualified ship recycling facilities. Disposal of government vessels by foreign recycling facilities is prohibited by the Duncan Hunter National Defense Authorization Act of FY 2009, Pub. L. 110-417, § 3502, 122 Stat. 4356 (Oct. 14, 2008).

Procurement Method

The primary disposal methods available to the program are the sale of vessels for recycling or the procurement of recycling services through the use of appropriated funds. Ninety-five percent of all vessel disposal actions since FY 2001 have been via ship recycling. The program has evolved into a streamlined vessel sales and acquisition methodology. Utilizing the FAR Part 13 Commercial Acquisition Procedure Standing Quotations, MARAD qualifies ship recycling facilities through the submittal of general technical proposals. Once qualified, the ship recycling facility is eligible to submit sales or service offers for the disposal of MARAD selected non-retention vessels. MARAD periodically identifies specific vessel(s) for disposal via an electronic Announcement issued only to qualified ship recycling facilities. The announcement contains both a Request for Sales Offers (RFSO) and a Request for Price Quotations (RFPQ) as identified under the solicitation. The requests are independent of each other, and only when no RFSO's are received will MARAD officially request RFPQs. For either type of contract, awards are made based on the best-value criteria described in the SDP solicitation. The streamlined vessel recycling acquisition process has been refined to the point where the SDP can issue a vessel announcement, receive either sales or service offers, conduct the best value evaluations, and issue contract awards in under sixty calendar days.

Program Effectiveness

The SDP has proven to be very adept at taking advantage of the volatile scrap steel market. Careful monitoring of scrap steel prices allows the program to react quickly to surges in the price of scrap steel by selling more vessels. Consequentially, the SDP has been able to sell large numbers of non-retention vessels when the price of scrap steel is rising or at market highs. Conversely, when the price of scrap steel falls, the SDP has difficulty selling vessels for recycling and must procure ship recycling services using appropriations. This is primarily a function of limited available funding at the time of the market fluctuation. A minimal annual base funding level for the procurement of ship recycling services would eliminate this issue and

¹⁴ 40 USC 548: Surplus Vessels

allow the SDP the flexibility to readily respond to down cycles in scrap steel prices, thereby continuing the removal of non-retention vessels mitigating environmental threats and vessel backlogs, and assist in maintaining a skilled industrial base of qualified ship recycling facilities. In FY 2018, MARAD successfully sold three NDRF vessels for recycling, crediting the VORF account with approximately \$3.0 million in revenues.

MARAD internal controls, acquisition procedures, information and communication processes, and budgetary and reporting structures provide a framework whereby the SDP has a low risk of not meeting its goals and objectives based on the execution of its processes and procedures. The program will, however, always remain subject to external factors beyond its control that can impact its ability to meet its goals and objectives. These primary factors bear repeating and include: a) the market price of scrap metals; b) the vessel's size/condition; c) the type and quantity of hazardous materials contained in the vessel; d) the quantity and type of recyclable materials that make up the vessel; e) the amount of competition for each vessel; f) the duration/cost of the tow from the fleet to the recycling facility; and g) the cost to remove marine growth from the vessel's hull prior to towing to different bio-geographical areas.

Federal Vessel Outreach Issues

Because of the issues that arose out of the sale of the former USCG vessel STORIS to US Metals Recycling of San Diego, CA, which in turn resold the vessel to a recycler in Mexico,¹⁵ the DOT Office of Inspector General (OIG) conducted an inquiry into the operations of MARAD's SDP. On December 10, 2015, OIG issued Report Number: ST-2016-2011 identifying weakness in MARAD's Management Controls with respect to issues relating to the handling of vessels by other Federal agencies. The OIG Report can be found at <https://www.oig.dot.gov/library-item/32838>.

In summary, the report noted the MARAD SDP did not have sufficient agreements in place with other Federal agencies to insure that other Federal Agencies fulfill their responsibilities to work with MARAD as the Government's disposal agent for merchant-type vessels or vessels capable of being converted to merchant-type use greater than 1,500 gross tons.¹⁶ The OIG Report stated, "even though MARAD had the agreement with the USCG to dispose of two of its cutters, the USCG disposed of another cutter, the STORIS, through GSA without consulting MARAD to determine if the STORIS fell within the Agency's purview. When MARAD does not dispose of vessels for which it is responsible, the Agency may not receive proceeds for its VORF for MARAD and the NPS programs."¹⁷

¹⁵ The USCG STORIS was decommissioned in Kodiak, Alaska, in February 2007 and transferred to MARAD's Suisun Bay Reserve Fleet in June 2007 for safekeeping. The USCG gave the STORIS to GSA to sell in June 2012. GSA relied on USCG self-certification that there were no PCBs on the STORIS. The vessel was sold for \$70,100 to US Metals Recycling of San Diego, CA. Thereafter, US Metals Recycling unsuccessfully attempted to sell the STORIS to a third-party group that wanted it for a museum. When this sale failed to materialize, US Metals Recycling removed the STORIS from the Suisun Bay Reserve Fleet in October of 2013 to Ensenada, Mexico, for scrapping by a foreign recycler. The U.S. ship recycling industry and the Museum Group notified the U.S. Environmental Protection Agency and requested an investigation into the possible export of polychlorinated biphenyls in violation of Toxic Substances Control Act. A complaint was filed with the DOT OIG arguing the vessel should have been disposed of through the MARAD ship disposal program.

¹⁶ Surplus Vessels (40 U.S.C. § 548).

¹⁷ The National Maritime Heritage Act of 1994 (54 U.S.C. § 308704).

The OIG concluded MARAD had not thoroughly documented risk mitigation strategies; fully implemented key workforce actions and developed policies; or provided sufficient policies, controls, and monitoring for effective program implementation. The OIG Report recommended MARAD develop or update policies and procedures to carry out MARAD's ship disposal responsibilities under 40 U.S.C. § 548, including policies and procedures for:

- a. identifying the universe of Government-owned vessels that meet the statutory criteria for MARAD to serve as the disposal agent; and
- b. notifying agencies that own these vessels of MARAD's disposal agent role.

Ship Disposal Program Policy Implementation

As a result of the OIG Report and the actions of Congress, the MARAD SDP issued Policy Directive 16-03 on June 28, 2016, establishing a Federal vessel outreach program with corresponding procedures, to:

- a. Identify the universe of vessel owned and operated by the Federal Government for which MARAD will be the exclusive disposal agency;
- b. Notify other Federal Agencies of MARAD's role and responsibilities for vessel disposal under 40 U.S.C. § 548; and
- c. Annually collect disposal schedules for Government-owned merchant-type vessel from other Federal agencies for dissemination to Congress and the domestic ship recycling industry.

MARAD has identified the Federal Agencies who own and operate merchant-type vessels or vessels that can be converted to merchant-type use that meet and exceed the 1,500-gross ton statutory criteria. They include the United States Army Corps of Engineers (USACE), the Department of the Army (ARMY), MARAD, the Department of the Navy (NAVY), NAVSEA Inactive Ships Office (Sea 21I), NAVSEA Military Sealift Command (MSC), NAVSEA Office of Naval Research, (ONR), National Science Foundation (NSF), National Oceanic and Atmospheric Administration, (NOAA), and the USCG. In FY's 2016 – 2018, MARAD requested and received vessel disposal data from each such agency for its list of vessels meeting the statutory threshold for which MARAD would act as the disposal agent.

USCG OAKRIDGE

In August 2018, MARAD became aware the GSA had posted a sale/auction announcement on the GSA Auctions website for the sale of the USCG Ex-OAKRIDGE.¹⁸ It was not clear why the OAKRIDGE could be sold by the GSA when the USCG had previously reported to MARAD it was a vessel to be disposed of by MARAD.¹⁹

¹⁸ USS Oak Ridge (ARD-19), was originally a US Navy *ARD-12*-class floating dry dock suitable for docking destroyers, submarines, and landing craft. Built in 1944, the dry-dock was self-propelled but unable to cross the ocean under her own power; she was towed in stages across the Pacific in support of WWII operations. In the early 1960s she was upgraded to support Los Angeles-class submarines, and re-classified as ARDM-1-class. In February 2002, she was transferred to the United States Coast Guard. The dry-dock was recommissioned in the Coast Guard at the United States Coast Guard Yard, Curtis Bay, Baltimore, Maryland in 2003 and has remained there since.

¹⁹ MARAD reported the OAKRIDGE as a vessel in its FY's 2016-2017 Annual Ship Disposal Program Report, which was disseminated to the Domestic Ship Recycling industry. Further, MARAD reported to Congress the OAKRIDGE as a vessel in the FY 2017 Biennial Program Assessment.

The auction offered the vessel in its “AS IS WHERE IS” condition. MARAD noted the following discrepancies in the announcement:

- a. The auction was silent regarding the proposed use of the vessel. There was no reference to the prohibition on exporting vessels for recycling as contained in Section 3502 of the Duncan Hunter National Defense Authorization Act of FY 2009, Pub. L. 110-417, 122 Stat. 4356 (Oct. 14, 2008).
- b. It was unclear what environmental laws were applicable to the sale. The only requirement was that the buyer self-certify post-sale compliance with Federal, State, and local regulations.

MARAD via letter expressed its concerns to the USCG and requested the USCG provide adequate safeguards against the vessel’s future recycling in foreign recycling facilities with particular reference to the statutory prohibition on using foreign recycling facilities for government vessels contained in Section 3502 of P.L. 110-417. MARAD also expressed concern that the disposal of the OAKRIDGE conforms to all of the environmental requirements incident to vessel disposal, specifically the prohibition against the distribution in commerce of PCBs which is a violation of the Toxic Substance Control Act.

In their reply to MARAD, the USCG offered a draft legal analysis which determined the OAKRIDGE was not a “vessel”, within the meaning of 1 U.S.C. § 3 but was instead floating equipment. Since the OAKRIDGE was not a vessel, the USCG concluded it was not subject to the requirements that it be disposed of by MARAD under 40 U.S.C. § 548. The USCG draft legal analysis did not address nor did the sale require compliance with the environmental laws relating to vessels as well as the statutory prohibition on exporting Federal Governmental vessels for recycling in foreign facilities.

The USCG’s draft legal analysis has far reaching implications with respect to the status of all watercraft of the Federal Government as vessels. The implications of this analysis go beyond which agency has the authority to dispose of such ships.

In its legal analysis, the USCG citing the Supreme Court’s decision in *Lozman v. City of Rivera Beach Florida*, 568 U.S.115 (2013), found that the OAKRIDGE has deteriorated to a condition that it was no longer “capable of being used as a means of transportation.” Id. at 120 (quoting 1 U.S.C. § 3). Under the USCG’s analysis, if a vessel is no longer capable of serving as a means of transportation, then it is no longer a vessel.

The GSA utilizes 41 C.F.R. §102-36.40 Disposition of Excess Personal Property when selling excess Government Property. Vessels are defined as ships, boats and craft designed for navigation in and on the water, propelled by oars or paddles, sail, or power. This definition is predicated on the original design of the vessel and makes no distinction as to whether the vessel has deteriorated, been altered or modified such that it is no longer capable of serving as a means of transportation. The OAKRIDGE was originally designed as a vessel for the Navy. Under the GSA operating definition of a vessel it is unclear why the GSA was involved in the sale of OAKRIDGE as the dry-dock never loses its designation as a vessel.

In the context of the disposal of obsolete non-retention vessels, few of these are maintained in a condition where they are licensed and ready to service as a means of transportation. The USCG's analysis could apply to most of the vessels disposed of by MARAD. Moreover, under the USCG analysis, an owner of vessel could change the legal status of that craft simply by taking certain actions with respect to its operating capabilities or how it is moored to a pier. The USCG legal analysis introduces uncertainty into all regulatory systems that apply to "vessels." Few, if any, of the obsolete non-retention ships disposed of by MARAD retain their documentation and are ready to legally service as a legal means for the transportation of goods or passengers.

It should be noted that the USCG also argued that dry-docks are not vessels. However, this argument ignored that fact that the USCG licenses dry-docks as vessels. There also is case law in which dry-docks have been found to be vessels.

MARAD sent a follow-on letter to the USCG and the GSA, requesting cancellation of the GSA auction until such time as the question of the vessel's status (vessel/floating equipment) could be resolved. MARAD pointed out that in response to two previous Federal Ship outreach data requests in both FY's 2016 and FY 2017, the USCG identified the OAKRIDGE as a vessel. Based on the USCG designation, MARAD reported to Congress in its annual report on the disposal or potential disposal of vessels owned by the Federal Government. MARAD also reiterated that the auction terms did not prevent the OAKRIDGE from being scrapped in a foreign scrapping facility. In addition, MARAD requested the USCG provide a copy of its formal legal opinion that the OAKRIDGE was not a vessel.

MARAD monitored the GSA web site and determined the OAKRIDGE was sold to the highest bidder on September 6, 2018 for \$1,396,099. The buyer is East Coast Repair & Fabrication, LLC, located in Norfolk, VA.

During the November 2018 Ship Recycling Town hall meeting in Brownsville, TX the recycling industry expressed their concerns with regard to the sale by the GSA of the USCG OAKRIDGE. It was not clear to them why the OAKRIDGE was not disposed of through the MARAD SDP.

In December 2018, MARAD sent letters of concern to the USCG's Excess Property Manager and the Office of Maritime and International Law expressing its concerns and implications of the USCG's rationale for determining the OAKRIDGE was not a vessel. Specifically, under the USCG opinion if a ship is not a vessel because it is no longer capable of serving as a means of transport, then under the USCG rationale, such a ship of any size could be sold by the GSA for domestic or foreign reuse or recycling. Similar letters were sent to the GSA's General Counsel and the Office of Personal Property Management.

In February, MARAD received a reply from the USCG Office of Maritime and International Law providing a post-sale formal legal opinion of the rationale for their determination that the OAKRIDGE was floating equipment and not a vessel.

MARAD has kept the DOT OIG apprised of the events surrounding the sale of the OAKRIDGE and expressed its concerns with the USCG and GSA's justifications for the determining the OAKRIDGE was not a vessel, the lack of coordination with MARAD, and the lack of safeguards in the sale announcement. MARAD has deep concerns with respect to the uncertainty the USCG

opinion introduces concerning whether an obsolete non-retention watercraft is a “vessel”. The USCG opinion allows for each agency to self-determine what is or is not a vessel at the time of disposition.

IV. CONCLUSIONS

An aggressive program of maximizing the use of disposal funding and pursuing all feasible disposal options has resulted in the removal of 226 obsolete vessels since 2001. Those removals from the MARAD fleet sites has reversed a trend in the growth of the number of obsolete ships in MARAD’s custody. As of October 1, 2018, there were only 8 non-retention ships remaining in MARAD’s three fleet sites, which is a historic low.

Moreover, the best-value award and removal of all of the Program’s high priority ships has significantly mitigated the threat of residual oil and exfoliating paint discharge into the environment.

MARAD has credited approximately \$70 million in ship sales revenue to the VORF since FY 2010. The VORF A sub-account has distributed approximately \$37.9 million to various projects associated with repairs, maintenance, and upgrades to vessels in the NDRF. The VORF B sub-account has distributed approximately \$19.2 million to the USMMA and six State Maritime Academies for facility and training ship maintenance, repair, and modernization, and for the purchase of simulators and fuel. The VORF C sub-account has distributed approximately \$16.2 million, of which \$10.8 million has been provided to the NPS for utilization in the NMHGP.

The market price of recyclable steel is the primary factor which affects the Government’s ability to sell vessels for recycling and procure recycling services. The price of scrap steel is volatile in nature, unpredictable and derived from worldwide economic conditions. It directly affects other ship recycling variables such as the availability of competitive recycling facilities with available capacity and adequate production throughput; dry-dock availability (for SBRF ships); the costs of environmental remediation of hazardous material streams such as asbestos, PCBs and loose exterior paint present on the non-retention vessels and the nature and number of vessels recycled in the US, both government and non-government.

The collapse of scrap steel prices from 2014 through mid-2017, fueled by slowing worldwide demand for processed and finished steel products, depressed the domestic ship recycling industry. Domestic recycling facilities were unable to afford to purchase MARAD/Navy vessels for recycling. The low price of scrap steel makes it uneconomical for ship recyclers to recycle MARAD/Navy non-retention vessels without being paid to recycle vessels.

The rebound in scrap steel prices from early 2017 reduced the Federal Government’s cost of procuring recycling services and led to the sale of three NDRF non-retention vessels for recycling in FY 2018. By mid-2018, steel prices rebounded sufficiently so that domestic recyclers were willing to purchase vessels for recycling from the Federal Government.

Nevertheless, future significant market fluctuations are beyond SDP's control and can significantly affect meeting performance targets. Early indications going into FY 2019 are that there will be a robust US demand for scrap steel with decent prices, which while settling lower in the latter half of FY 2018, should remain high enough in the foreseeable future for MARAD to sell vessels for recycling from the BRF and JRRF fleets.

However, reliance on MARAD ship sales as the primary revenue stream into the VORF to fund projects in the NDRF, to provide additional funds to the USMMA and the six State Maritime Academies, and to fund maritime heritage projects in the NPS's and NMHGP is not sustainable in the long term given the volatility of the scrap steel market, the minimal number of non-retention vessels in the disposal queue, and the projected low number of future vessel retirements. Moreover, the recent USCG legal opinion with respect to the vessel status of the OAKRIDGE raises serious questions about whether Federal agencies will be required in the future to dispose of their ships through MARAD and follow the environmental requirements applicable to the disposal of vessels. Under the USCG analysis, the very watercraft that merit close environmental monitoring, those that are significantly deteriorated, cease to be vessels because they are no longer capable of transporting goods or passengers.

The contemporary NSS licensed activities program continues to meet both the letter and intent of NRC requirements while maintaining MARAD's required institutional nuclear proficiencies and competencies. The NRC inspections since 2001 have reported no findings of safety significance. Concurrent with those activities, STS maintains and upholds MARAD's continuous focus on its stewardship responsibilities when conducting activities on the NSS site. This approach towards management of the NSS is fully embedded in the overarching methodology for decommissioning activities, which has borne out during the first year of decommissioning operations.

APPENDIX A

United States Army Corp of Engineers – List of Vessels

United States Army Corp of Engineers-USACE														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	Wheeler	MT	Dredge	Active	1982	37								TBD
2	Essayons	MT	Dredge	Active	1983	36								TBD
3	McFarland	MT	Dredge	Active	1966	53								TBD
4	Hurley	MT	Dredge	Active	1993	26								TBD
5	Yaquina	MT	Dredge	Active	1981	38								TBD
6	Jadwin	MT	Dredge	Active	1933	86								TBD
7	Potter	MT	Dredge	Active	1932	87								TBD
8	Mississippi	MT	Towboat	Active	1993	26								TBD
Legend		Disposition Summary			Planned Removal from Service Summary									
MT	Merchant Type Vessel		Retain	0				Avail for	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEX	0				Disposal	FY 19	FY 20	FY 21	FY 22	FY 23	
Active	Operating/Readiness/Support status		Foreign Military Sales	0				0	0	0	0	0	0	
Inactive	Non-operating/Non-retention status		Scrap	0										
X	Foreign Military Sales		Donation	0				Changes to vessel disposition status and retirement dates are in bold						
X	SINKEX		TBD	0										
X	Scrap		Total Inactive	0										
X	Donation		Total Active	8										
X	Remove From Service		Total Number of Ships*	8				* This represents the total number of vessels greater than 1,500 gross tons owned by the USACE						

APPENDIX B

United States Department of the Army – List of Vessels

United States Department of the Army - ARMY														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	USAV General Frank S. Besson, Jr (LSV-1)	MT	Logistics Support Vessel	Active	1988	31								2029
2	USAV CW3 Harold C. Clinger (LSV-2)	MT	Logistics Support Vessel	Active	1988	31								2029
3	USAV General Brehon B. Somervell (LSV-3)	MT	Logistics Support Vessel	Active	1988	31								2029
4	USAV Lt. General William B. Bunker (LSV-4)	MT	Logistics Support Vessel	Active	1988	31								2029
5	USAV Major General Charles P. Gross (LSV-5)	MT	Logistics Support Vessel	Active	1991	28								2029
6	USAV SP4 James A. Loux (LSV-6)	MT	Logistics Support Vessel	Active	1995	24								2029
7	USAV SSGT Robert T. Kuroda (LSV-7)	MT	Logistics Support Vessel	Active	2003	16								2027
8	USAV Major General Robert Smalls (LSV-8)	MT	Logistics Support Vessel	Active	2003	16								2027
9	USAV Worthy (T-AGOS-14)	MT	Missile Instrumentation Ship	Active	1986	33								2027
10	Keystone State 6801	MT	Barge Derrick	Active	1998	21								2029
11	Saltillo 6802	MT	Barge Derrick	Active	1999	20								2029
12	Springfield 6803	MT	Barge Derrick	Active	2000	19								2030
13	Delaware 6804	MT	Barge Derrick	Active	2000	19								2030
Legend														
MT Merchant Type Vessel		Disposition Summary				Planned Removal from Service Summary								
C	Combatant Vessel		Retain	0			Avail for	Fiscal Year Removed from Service						
Active	Operating/Readiness/Support status		SINKEX	0			Disposal	FY 19	FY 20	FY 21	FY 22	FY 23		
Inactive	Non-operating/Non-retention status		Foreign Military Sales	0			0	0	0	0	0	0		
X	Foreign Military Sales		Scrap	0			Changes to vessel disposition status and retirement dates are in bold							
X	SINKEX		Donation	0										
X	Scrap		TBD	0										
X	Donation		Total Inactive	0										
X	Remove From Service		Total Active	13										
X			Total Number of Ships*	13			* This represents the total number of vessels greater than 1,500 gross tons owned by the ARMY							
CHANGES IN VESSEL STATUS FROM THE PREVIOUS FISCAL YEAR														
1	USAV Worthy (T-AGOS-14)	MT	Missile Instrumentation Ship	Active	1986	33	The vessel was added to the list of Army vessels in FY 2018.							

APPENDIX C

United States Maritime Administration – List of Vessels

United States Maritime Administration - MARAD														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	FB-62	MT	Barge Office	Active	1944	75								2035
2	Cape Farewell	MT	Barge Ship	Active	1973	46								2033
3	Cape Flattery	MT	Barge Ship	Active	1973	46								2033
4	Cape Fear	MT	Barge Ship	Active	1971	48								2031
5	Cape Florida	MT	Barge Ship	Inactive	1971	48	Scrap	X						2017
6	Cape May	MT	Barge Ship	Active	1972	47								2025
7	Cape Mendocino	MT	Barge Ship	Active	1972	47								2032
8	Cape Mohican	MT	Barge Ship	Active	1973	46	Scrap						X	2023
9	Curtiss	MT	Break Bulk	Active	1969	50								2025
10	Wright	MT	Break Bulk	Active	1970	49								2026
11	Cape Gibson	MT	Break Bulk	Inactive	1968	51	Scrap	X						2015
12	Cape Girardeau	MT	Break Bulk	Active	1968	51	Scrap			X				2020
13	Cape Jacob	MT	Break Bulk	Active	1961	58	Scrap			X				2020
14	Cape Juby	MT	Break Bulk	Active	1962	57								2030
15	Cape Nome	MT	Break Bulk	Active	1969	50	Scrap					X		2022
16	Cape Archway	MT	Break Bulk	Inactive	1963	56	Scrap	X						2009
17	Cape Avinof	MT	Break Bulk	Active	1963	56								2029
18	Cape Ann	MT	Break Bulk	Active	1962	57								2029
19	Cape Bover	MT	Break Bulk	Active	1966	53								2030
20	Del Monte	MT	Break Bulk	Active	1968	51								2029
21	Cape Chalmers	MT	Break Bulk	Active	1963	56								2029
22	Cape Alexander	MT	Break Bulk	Inactive	1962	57	Scrap	X						2009
23	Cape Alava	MT	Break Bulk	Inactive	1962	57	Scrap	X						2013
24	Gopher State	MT	Crane Ship	Active	1973	46								2028
25	Flickertail State	MT	Crane Ship	Active	1969	50								2024
26	Cornhusker State	MT	Crane Ship	Active	1969	50								2024
27	Keystone State	MT	Crane Ship	Active	1967	52								2026
28	Grand Canyon State	MT	Crane Ship	Active	1966	53								2025
29	Gem State	MT	Crane Ship	Active	1966	53								2025
30	Diamond State	MT	Crane Ship	Active	1960	59	Scrap			X				2020
31	Equality State	MT	Crane Ship	Inactive	1962	57	Scrap	X						2016
32	Green Mountain State	MT	Crane Ship	Active	1965	54								2025
33	Algol	MT	Roll-On/Roll-Off	Active	1973	46								2033
34	Bellatrix	MT	Roll-On/Roll-Off	Active	1973	46								2033
35	Capella	MT	Roll-On/Roll-Off	Active	1973	46								2033
36	Antares	MT	Roll-On/Roll-Off	Active	1972	47								2032
37	Denebola	MT	Roll-On/Roll-Off	Active	1974	45								2034
38	Regulus	MT	Roll-On/Roll-Off	Active	1973	46								2033
39	Altair	MT	Roll-On/Roll-Off	Active	1973	46								2033
40	Pacific Tracker	MT	Missile Instrumentation Ship	Active	1965	54								2027
41	Pacific Collector	MT	Missile Instrumentation Ship	Active	1970	49								2027
42	NS Savannah	MT	Nuclear Ship	Active	1962	57								2031
43	Cape Hudson	MT	Roll-On/Roll-Off	Active	1979	40								2029

United States Maritime Administration - MARAD

No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
44	Cape Horn	MT	Roll-On/Roll-Off	Active	1979	40								2029
45	Cape Henry	MT	Roll-On/Roll-Off	Active	1979	40								2029
46	Cape Inscription	MT	Roll-On/Roll-Off	Active	1976	43								2026
47	Cape Isabel	MT	Roll-On/Roll-Off	Active	1977	42								2027
48	Cape Island	MT	Roll-On/Roll-Off	Active	1977	42								2027
49	Cape Intrepid	MT	Roll-On/Roll-Off	Active	1976	43								2026
50	Admiral Callaghan	MT	Roll-On/Roll-Off	Active	1968	51	Scrap					X		2023
51	Pollux	MT	Roll-On/Roll-Off	Active	1973	46								2033
52	Cape Washington	MT	Roll-On/Roll-Off	Active	1982	37								2032
53	Cape Wrath	MT	Roll-On/Roll-Off	Active	1982	37								2032
54	Cape Victory	MT	Roll-On/Roll-Off	Active	1985	34								2035
55	Cape Vincent	MT	Roll-On/Roll-Off	Active	1984	35								2034
56	Cape Texas	MT	Roll-On/Roll-Off	Active	1977	42								2027
57	Cape Taylor	MT	Roll-On/Roll-Off	Active	1977	42								2027
58	Cape Kennedy	MT	Roll-On/Roll-Off	Active	1979	40								2029
59	Cape Knox	MT	Roll-On/Roll-Off	Active	1979	40								2029
60	Cape Orlando	MT	Roll-On/Roll-Off	Active	1981	38								2031
61	Cape Rise	MT	Roll-On/Roll-Off	Active	1977	42								2027
62	Cape Ray	MT	Roll-On/Roll-Off	Active	1977	42								2027
63	Cape Race	MT	Roll-On/Roll-Off	Active	1977	42								2027
64	Cape Diamond	MT	Roll-On/Roll-Off	Active	1972	47								2032
65	Cape Domingo	MT	Roll-On/Roll-Off	Active	1973	46								2033
66	Cape Decision	MT	Roll-On/Roll-Off	Active	1973	46								2033
67	Cape Douglas	MT	Roll-On/Roll-Off	Active	1973	46								2033
68	Cape Ducato	MT	Roll-On/Roll-Off	Active	1972	47								2032
69	Cape Edmont	MT	Roll-On/Roll-Off	Active	1971	48								2031
70	Cape Trinity	MT	Roll-On/Roll-Off	Active	1978	41								2028
71	Simon Lake	MT	Submarine Tender	Inactive	1964	55	Scrap	X						2006
72	Triumph	MT	Surveillance Ship	Active	1984	35								2030
73	Sumner	MT	Surveying Ship	Inactive	1992	27	Scrap	X						2014
74	Petersburg	MT	Tanker	Active	1963	56	Scrap				X			2021
75	Chesapeake	MT	Tanker	Active	1964	55	Scrap							TBD
76	Samuel L Cobb	MT	Tanker	Active	1985	34								2045
77	Paul Buck	MT	Tanker	Active	1985	34								2045
78	Richard G Matthiesen	MT	Tanker	Active	1983	36								2045
79	Kennedy	MT	Training Ship	Active	1967	52	Scrap							2024
80	Empire State	MT	Training Ship	Active	1962	57	Scrap				X			2022
81	State Of Maine	MT	Training Ship	Active	1989	30								2034
82	Golden Bear	MT	Training Ship	Active	1971	48								2034
83	State Of Michigan	MT	Training Ship	Active	1985	34								2035
84	General Rudder	MT	Training Ship	Active	1984	35								2034
Legend		Disposition Summary			Planned Removal from Service Summary									
MT	Merchant Type Vessel		Retain	0				Avail for Disposal	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEX	0				FY 19	FY 20	FY 21	FY 22	FY 23		
Active	Operating/Readiness/Support status		Foreign Military Sales	0				8	0	3	1	2	2	
Inactive	Non-operating/Non-retention status		Scrap	18										
X	Foreign Military Sales		Donation	0				Changes to vessel disposition status and retirement dates are in bold						
X	SINKEX		TBD	0										
X	Scrap		Total Inactive	8										
X	Donation		Total Active	76										
X	Remove From Service		Total Number of Ships*	84										
* This represents the total number of vessels greater than 1,500 gross tons owned by MARAD														
CHANGES IN VESSEL STATUS FROM THE PREVIOUS FISCAL YEAR														
1	Cape Johnson	MT	Break Bulk	Inactive	1962	57	The vessel was removed from the James River Reserve Fleet for recycling in October 2017							
2	Harkness	MT	Surveying Ship	Inactive	1967	52	The vessel was removed from the James River Reserve Fleet for recycling in October 2017							
3	Observation Island	MT	Missile Instrumentation	Inactive	1954	65	The vessel was removed from the Beaumont Reserve Fleet for recycling in May 2018							
4	Tripoli	MT	Amphibious Assault Ship	Inactive	1966	53	The vessel was removed from the Beaumont Reserve Fleet for recycling in May 2018							
5	Cape Lobos	MT	Roll-On/Roll-Off	Inactive	1972	47	The vessel was removed from the Beaumont Reserve Fleet for recycling in August 2018							
6	Cape Juby	MT	Break Bulk	Active	1962	57	The vessel is retained for logistics support for MARAD training vessels.							
7	Cape Avinof	MT	Break Bulk	Active	1963	56	The vessel is retained for use as a stationary training vessel							
8	Cape Ann	MT	Break Bulk	Active	1962	57	The vessel is retained for use as a stationary training vessel							
9	Cape Bover	MT	Break Bulk	Active	1966	53	The vessel is retained for logistics support for MARAD training vessels							
10	Triumph	MT	Surveillance Ship	Active	1984	35	The vessel is retained for logistics support for MARAD training vessels							

APPENDIX D

United States Navy NAVSEA - List of Navy Active Ships

United States Department of the Navy														
Navy Active Ships - NAVSEA														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	USS Enterprise (CVN-65)	C	Aircraft Carrier	Inactive	1960	59	Retain							2017
2	USS America (LHA-6)	MT	Amphibious Assault Ship	Active	2012	7								TBD
3	USS Makin Island (LHD-8)	MT	Amphibious Assault Ship	Active	2006	13								TBD
4	USS WASP (LHD 1)	MT	Amphibious Assault Ship	Active	1987	32								TBD
5	USS Essex (LHD-2)	MT	Amphibious Assault Ship	Active	1991	28								TBD
6	USS Kearsarge (LHD-3)	MT	Amphibious Assault Ship	Active	1992	27								TBD
7	USS Boxer (LHD-4)	MT	Amphibious Assault Ship	Active	1993	26								TBD
8	USS Bataan (LHD-5)	MT	Amphibious Assault Ship	Active	1996	23								TBD
9	USS Bonhomme Richard (LHD-6)	MT	Amphibious Assault Ship	Active	1997	22								TBD
10	USS Iwo Jima (LHD-7)	MT	Amphibious Assault Ship	Active	2000	19								TBD
11	USS Blue Ridge (LCC-19)	MT	Amphibious Command Ship	Active	1969	50								TBD
12	USS Mount Whitney (LCC-20)	MT	Amphibious Command Ship	Active	1970	49								TBD
13	USS Lewis B Puller (T-ESB 3)	MT	Expeditionary Sea Base	Active	2015	4								TBD
14	USS San Antonio (LPD-17)	MT	Amphibious Transport Dock	Active	2003	16								TBD
15	USS New Orleans (LPD-18)	MT	Amphibious Transport Dock	Active	2004	15								TBD
16	USS Mesa Verde (LPD-19)	MT	Amphibious Transport Dock	Active	2004	15								TBD
17	USS John P. Murtha (LPD-26)	MT	Amphibious Transport Dock	Active	2014	5								TBD
18	USS Somerset (LPD-25)	MT	Amphibious Transport Dock	Active	2012	7								TBD
19	USS Arlington (LPD-24)	MT	Amphibious Transport Dock	Active	2010	9								TBD
20	USS Anchorage (LPD-23)	MT	Amphibious Transport Dock	Active	2011	8								TBD
21	USS San Diego (LPD-22)	MT	Amphibious Transport Dock	Active	2010	9								TBD
22	USS New York (LPD-21)	MT	Amphibious Transport Dock	Active	2007	12								TBD
23	USS Green Bay (LPD-20)	MT	Amphibious Transport Dock	Active	2006	13								TBD
24	USS Rushmore (LSD-47)	MT	Dock Landing Ship	Active	1989	30								TBD
25	USS Ashland (LSD-48)	MT	Dock Landing Ship	Active	1989	30								TBD
26	USS Tortuga (LSD-46)	MT	Dock Landing Ship	Active	1988	31								TBD
27	USS Comstock (LSD-45)	MT	Dock Landing Ship	Active	1988	31								TBD
28	USS Gunston Hall (LSD-44)	MT	Dock Landing Ship	Active	1987	32								TBD
29	USS Fort McHenry (LSD-43)	MT	Dock Landing Ship	Active	1986	33								TBD
30	USS Germantown (LSD-42)	MT	Dock Landing Ship	Active	1984	35								TBD
31	USS Whidbey Island (LSD-41)	MT	Dock Landing Ship	Active	1983	36								TBD
32	USS Chancellorsville (CG 62)	C	Guided Missile Cruiser	Active	1988	31								TBD
33	USS Bunker Hill (CG 52)	C	Guided Missile Cruiser	Active	1985	34	Retain			X				2020
34	USS Mobile Bay (CG 53)	C	Guided Missile Cruiser	Active	1985	34	Retain			X				2020
35	USS Antietam (CG 54)	C	Guided Missile Cruiser	Active	1986	33	Retain					X		2022
36	USS Leyte Gulf (CG 55)	C	Guided Missile Cruiser	Active	1986	33	Retain					X		2022
37	USS San Jacinto (CG 56)	C	Guided Missile Cruiser	Active	1986	33								TBD
38	USS Lake Champlain (CG 57)	C	Guided Missile Cruiser	Active	1987	32								TBD
39	USS Philippine Sea (CG 58)	C	Guided Missile Cruiser	Active	1987	32								TBD
40	USS Princeton (CG 59)	C	Guided Missile Cruiser	Active	1987	32								TBD
41	USS Monterey (CG 61)	C	Guided Missile Cruiser	Active	1988	31								TBD
42	USS Cowpens (CG 63)	C	Guided Missile Cruiser	Active	1989	30								TBD
43	USS Gettysburg (CG 64)	C	Guided Missile Cruiser	Active	1989	30								TBD
44	USS Chosin (CG 65)	C	Guided Missile Cruiser	Active	1989	30								TBD
45	USS Hue City (CG 66)	C	Guided Missile Cruiser	Active	1990	29								TBD
46	USS Shiloh (CG 67)	C	Guided Missile Cruiser	Active	1990	29								TBD

United States Department of the Navy														
Navy Active Ships - NAVSEA														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
47	USS Anzio (CG 68)	C	Guided Missile Cruiser	Active	1990	29								TBD
48	USS Vicksburg (CG 69)	C	Guided Missile Cruiser	Active	1991	28								TBD
49	USS Lake Erie (CG 70)	C	Guided Missile Cruiser	Active	1991	28								TBD
50	USS Cape St. George (CG 71)	C	Guided Missile Cruiser	Active	1992	27								TBD
51	USS Vella Gulf (CG 72)	C	Guided Missile Cruiser	Active	1992	27								TBD
52	USS Port Royal (CG 73)	C	Guided Missile Cruiser	Active	1992	27								TBD
53	USS Normandy (CG 60)	C	Guided Missile Cruiser	Active	1988	31								TBD
54	USS Howard (DDG-83)	C	Guided Missile Destroyer	Active	1999	20								TBD
55	USS Winston S. Churchill (DDG-81)	C	Guided Missile Destroyer	Active	1999	20								TBD
56	USS Bulkeley (DDG-84)	C	Guided Missile Destroyer	Active	2000	19								TBD
57	USS Lassen (DDG-82)	C	Guided Missile Destroyer	Active	1999	20								TBD
58	USS Farragut (DDG-99)	C	Guided Missile Destroyer	Active	2005	14								TBD
59	USS McCampbell (DDG-85)	C	Guided Missile Destroyer	Active	2000	19								TBD
60	USS Shoup (DDG-86)	C	Guided Missile Destroyer	Active	2000	19								TBD
61	USS Mason (DDG-87)	C	Guided Missile Destroyer	Active	2001	18								TBD
62	USS Preble (DDG-88)	C	Guided Missile Destroyer	Active	2001	18								TBD
63	USS Mustin (DDG-89)	C	Guided Missile Destroyer	Active	2001	18								TBD
64	USS Chafee (DDG-90)	C	Guided Missile Destroyer	Active	2002	17								TBD
65	USS Pinckney (DDG-91)	C	Guided Missile Destroyer	Active	2002	17								TBD
66	USS Momsen (DDG-92)	C	Guided Missile Destroyer	Active	2003	16								TBD
67	USS Chung-Hoon (DDG-93)	C	Guided Missile Destroyer	Active	2002	17								TBD
68	USS Nitze (DDG-94)	C	Guided Missile Destroyer	Active	2004	15								TBD
69	USS James E. Williams (DDG-95)	C	Guided Missile Destroyer	Active	2003	16								TBD
70	USS Bainbridge (DDG-96)	C	Guided Missile Destroyer	Active	2004	15								TBD
71	USS Forrest Sherman (DDG-98)	C	Guided Missile Destroyer	Active	2004	15								TBD
72	USS Kidd (DDG-100)	C	Guided Missile Destroyer	Active	2004	15								TBD
73	USS Gridley (DDG-101)	C	Guided Missile Destroyer	Active	2005	14								TBD
74	USS Sampson (DDG-102)	C	Guided Missile Destroyer	Active	2006	13								TBD
75	USS Truxtun (DDG-103)	C	Guided Missile Destroyer	Active	2007	12								TBD
76	USS Sterett (DDG-104)	C	Guided Missile Destroyer	Active	2007	12								TBD
77	USS Dewey (DDG-105)	C	Guided Missile Destroyer	Active	2008	11								TBD
78	USS Stockdale (DDG-106)	C	Guided Missile Destroyer	Active	2008	11								TBD
79	USS Gravely (DDG-107)	C	Guided Missile Destroyer	Active	2009	10								TBD
80	USS Wayne E. Meyer (DDG-108)	C	Guided Missile Destroyer	Active	2008	11								TBD
81	USS Jason Dunham (DDG-109)	C	Guided Missile Destroyer	Active	2009	10								TBD
82	USS William P. Lawrence (DDG-110)	C	Guided Missile Destroyer	Active	2009	10								TBD
83	USS Spruance (DDG-111)	C	Guided Missile Destroyer	Active	2010	9								TBD
84	USS Michael Murphy (DDG-112)	C	Guided Missile Destroyer	Active	2011	8								TBD
85	USS Halsey (DDG-97)	C	Guided Missile Destroyer	Active	2004	15								TBD
86	USS Oscar Austin (DDG-79)	C	Guided Missile Destroyer	Active	1998	21								TBD
87	USS Roosevelt (DDG-80)	C	Guided Missile Destroyer	Active	1999	20								TBD
88	USS Milius (DDG-69)	C	Guided Missile Destroyer	Active	1995	24								TBD
89	USS John S. McCain (DDG-56)	C	Guided Missile Destroyer	Active	1992	27								TBD
90	USS Mitscher (DDG-57)	C	Guided Missile Destroyer	Active	1993	26								TBD
91	USS Laboon (DDG-58)	C	Guided Missile Destroyer	Active	1993	26								TBD

United States Department of the Navy														
Navy Active Ships - NAVSEA														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
92	USS Russell (DDG-59)	C	Guided Missile Destroyer	Active	1993	26								TBD
93	USS Paul Hamilton (DDG-60)	C	Guided Missile Destroyer	Active	1993	26								TBD
94	USS Fitzgerald (DDG-62)	C	Guided Missile Destroyer	Active	1994	25								TBD
95	USS Stethem (DDG-63)	C	Guided Missile Destroyer	Active	1994	25								TBD
96	USS Carney (DDG-64)	C	Guided Missile Destroyer	Active	1994	25								TBD
97	USS Benfold (DDG-65)	C	Guided Missile Destroyer	Active	1994	25								TBD
98	USS Gonzalez (DDG-66)	C	Guided Missile Destroyer	Active	1995	24								TBD
99	USS Curtis Wilbur (DDG-54)	C	Guided Missile Destroyer	Active	1992	27								TBD
100	USS The Sullivans (DDG-68)	C	Guided Missile Destroyer	Active	1995	24								TBD
101	USS John Paul Jones (DDG-53)	C	Guided Missile Destroyer	Active	1991	28								TBD
102	USS Hopper (DDG-70)	C	Guided Missile Destroyer	Active	1996	23								TBD
103	USS Ross (DDG-71)	C	Guided Missile Destroyer	Active	1996	23								TBD
104	USS Mahan (DDG-72)	C	Guided Missile Destroyer	Active	1996	23								TBD
105	USS Decatur (DDG-73)	C	Guided Missile Destroyer	Active	1996	23								TBD
106	USS McFaul (DDG-74)	C	Guided Missile Destroyer	Active	1997	22								TBD
107	USS Donald Cook (DDG-75)	C	Guided Missile Destroyer	Active	1997	22								TBD
108	USS Higgins (DDG-76)	C	Guided Missile Destroyer	Active	1997	22								TBD
109	USS O'Kane (DDG-77)	C	Guided Missile Destroyer	Active	1998	21								TBD
110	USS Porter (DDG-78)	C	Guided Missile Destroyer	Active	1997	22								TBD
111	USS Cole (DDG-67)	C	Guided Missile Destroyer	Active	1995	24								TBD
112	USS Stout (DDG-55)	C	Guided Missile Destroyer	Active	1992	27								TBD
113	USS Arleigh Burke (DDG-51)	C	Guided Missile Destroyer	Active	1989	30								TBD
114	USS Ramage (DDG-61)	C	Guided Missile Destroyer	Active	1994	25								TBD
115	USS Barry (DDG-52)	C	Guided Missile Destroyer	Active	1991	28								TBD
116	USS Zumwalt (DDG 1000)	C	Guided Missile Destroyer	Active	2013	6								TBD
117	USS Carter Hall (LSD-50)	MT	Landing Ship Dock	Active	1993	26								TBD
118	USS Harpers Ferry (LSD-49)	MT	Landing Ship Dock	Active	1993	26								TBD
119	USS Pearl Harbor (LSD-52)	MT	Landing Ship Dock	Active	1996	23								TBD
120	USS Oak Hill (LSD-51)	MT	Landing Ship Dock	Active	1994	25								TBD
121	USS Milwaukee (LCS-5)	C	Littoral Combat Ship	Active	2013	6								TBD
122	USS Fort Worth (LCS-3)	C	Littoral Combat Ship	Active	2010	9								TBD
123	USS Freedom (LCS-1)	C	Littoral Combat Ship	Active	2006	13								TBD
124	USS Jackson (LCS-6)	C	Littoral Combat Ship	Active	2013	6								TBD
125	USS Coronado (LCS-4)	C	Littoral Combat Ship	Active	2012	7								TBD
126	USS Detroit (LCS 7)	C	Littoral Combat Ship	Active	2014	5								TBD
127	USS Montgomery (LCS 8)	C	Littoral Combat Ship	Active	2014	5								TBD
128	USS Independence (LCS-2)	C	Littoral Combat Ship	Active	2008	11								TBD
Legend														
Disposition Summary														
Planned Removal from Service Summary														
MT	Merchant Type Vessel		Retain	5				Avail for	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEX	0				Disposal	FY 19	FY 20	FY 21	FY 22	FY 23	
Active	Operating/Readiness/Support status		Foreign Military Sales	0				0	0	2	0	2	0	
Inactive	Non-operating/Non-retention status		Scrap	0										
X	Foreign Military Sales		Donation	0				Changes to vessel disposition status and retirement dates are in bold						
X	SINKEX		TBD	0										
X	Scrap		Total Inactive	1										
X	Donation		Total Active	127										
X	Remove From Service		Total Number of Ships*	128										
* This represents the total number of vessels greater than 1,500 gross tons owned by Navy that are conventionally powered with the exception of the Ex-Enterprise (CVN-65)														

APPENDIX E

United States Navy Military Sealift Command – List of Vessels

United States Department of the Navy														
Military Sealift Command Active & Inactive Vessels														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	USNS Lewis and Clark (T-AKE 1)	MT	Ammo/Dry Cargo	Active	2005	14								2018
2	USNS Sacagawea (T-AKE 2)	MT	Ammo/Dry Cargo	Active	2006	13								TBD
3	USNS Alan Shepard (T-AKE 3)	MT	Ammo/Dry Cargo	Active	2006	13								TBD
4	USNS Richard E. Byrd (T-AKE 4)	MT	Ammo/Dry Cargo	Active	2007	12								TBD
5	USNS Robert E. Peary (T-AKE 5)	MT	Ammo/Dry Cargo	Active	2007	12								TBD
6	USNS Amelia Earhart (T-AKE 6)	MT	Ammo/Dry Cargo	Active	2008	11								TBD
7	USNS Carl Brashear (T-AKE 7)	MT	Ammo/Dry Cargo	Active	2008	11								TBD
8	USNS Wally Schirra (T-AKE 8)	MT	Ammo/Dry Cargo	Active	2009	10								TBD
9	USNS Matthew Perry (T-AKE 9)	MT	Ammo/Dry Cargo	Active	2010	9								TBD
10	USNS Charles Drew (T-AKE 10)	MT	Ammo/Dry Cargo	Active	2010	9								TBD
11	USNS Washington Chambers (T-AKE 11)	MT	Ammo/Dry Cargo	Active	2011	8								TBD
12	USNS William McLean (T-AKE 12)	MT	Ammo/Dry Cargo	Active	2011	8								TBD
13	USNS Medgar Evers (T-AKE 13)	MT	Ammo/Dry Cargo	Active	2011	8								TBD
14	USNS Cesar Chavez (T-AKE 14)	MT	Ammo/Dry Cargo	Active	2012	7								TBD
15	USNS Zeus (T-ARC 7)	MT	Cable Laying/Repair	Active	1982	37								TBD
16	USS Mount Whitney (LCC 20)	MT	Command Ship	Active	1970	49								2033
17	USNS SGT Matej Kocak (T-AK 3005)	MT	Container Roll-On/Roll-Off	Active	1983	36								2039
18	USNS PFC Eugene A. Obregon (T-AK 3006)	MT	Container Roll-On/Roll-Off	Active	1983	36								TBD
19	USNS MAJ Stephen W. Pless (T-AK 3007)	MT	Container Roll-On/Roll-Off	Active	1983	36								TBD
20	USNS 1st LT Harry L. Martin (T-AK 3015)	MT	Container Roll-On/Roll-Off	Active	1983	36	Retain		X					TBD
21	USNS LCPL Roy M. Wheat (T-AK 3016)	MT	Container Roll-On/Roll-Off	Active	1987	32								TBD
22	USNS Supply (T-AOE 6)	MT	Fast Combat Support Ship	Active	1990	29								TBD
23	USNS Arctic (T-AOE 8)	MT	Fast Combat Support Ship	Active	1993	26								TBD
24	USNS Mercy (T-AH 19)	MT	Hospital Ship	Active	1987	32								TBD
25	USNS Comfort (T-AH 20)	MT	Hospital Ship	Active	1976	43								TBD
26	USNS Guam (HST 1)	MT	High Speed Transport	Active	2008	11								TBD
27	USNS Spearhead (T-EPF-1)	MT	Expeditionary Fast Transport	Active	2012	7								TBD
28	USNS Fall River (T-EPF-4)	MT	Expeditionary Fast Transport	Active	2014	5								TBD
29	USNS Millinocket (T-EPF-3)	MT	Expeditionary Fast Transport	Active	2014	5								TBD
30	USNS Choctaw County (T-EPF-2)	MT	Expeditionary Fast Transport	Active	2013	6								TBD
31	USNS Watson (T-AKR 310)	MT	Medium Roll-On/Roll-Off	Active	1997	22								TBD
32	USNS Gordon (T-AKR 296)	MT	Medium Roll-On/Roll-Off	Active	1972	47								TBD
33	USNS Shughart (T-AKR 295)	MT	Medium Roll-On/Roll-Off	Active	1980	39								TBD
34	USNS Soderman (T-AKR 317)	MT	Medium Roll-On/Roll-Off	Active	2002	17								TBD
35	USNS Pomeroy (T-AKR 316)	MT	Medium Roll-On/Roll-Off	Active	2000	19								TBD
36	USNS Watkins (T-AKR 315)	MT	Medium Roll-On/Roll-Off	Active	2000	19								TBD
37	USNS Gilliland (T-AKR 298)	MT	Medium Roll-On/Roll-Off	Active	1972	47								TBD
38	USNS Red Cloud (T-AKR 313)	MT	Medium Roll-On/Roll-Off	Active	1999	20								TBD
39	USNS Bob Hope (T-AKR 300)	MT	Medium Roll-On/Roll-Off	Active	1997	22								TBD
40	USNS Charlton (T-AKR 314)	MT	Medium Roll-On/Roll-Off	Active	1999	20								TBD
41	USNS Yano (T-AKR 297)	MT	Medium Roll-On/Roll-Off	Active	1980	39								TBD
42	USNS Benavidez (T-AKR 306)	MT	Medium Roll-On/Roll-Off	Active	1999	20								TBD

United States Department of the Navy

Military Sealift Command Active & Inactive Vessels

No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year	
									FY 19	FY 20	FY 21	FY 22	FY 23		
43	USNS Brittin (T-AKR 305)	MT	Medium Roll-On/Roll-Off	Active	2000	19									2052
44	USNS Mendonca (T-AKR 303)	MT	Medium Roll-On/Roll-Off	Active	1999	20									2056
45	USNS Fisher (T-AKR 301)	MT	Medium Roll-On/Roll-Off	Active	1997	22									2049
46	USNS Howard O. Lorenzen (T-AGM 25)	MT	Missile Range Instrumentation	Active	2010	9									TBD
47	USNS Invincible (T-AGM 24)	MT	Missile Range Instrumentation	Active	1987	32									TBD
48	USNS John Glenn (T-ESD 2)	MT	Mobile Landing Platforms	Active	2012	7									TBD
49	USNS Montford Point (T-ESD 1)	MT	Mobile Landing Platforms	Active	2012	7									TBD
50	USNS Waters (T-AGS 45)	MT	Navigation Test Support	Active	1992	27									TBD
51	USNS Impeccable (T-AGOS 23)	MT	Ocean Surveillance	Active	1998	21									TBD
52	USNS Able (T-AGOS 20)	MT	Ocean Surveillance	Active	1991	28									TBD
53	USNS Loyal (T-AGOS 22)	MT	Ocean Surveillance	Active	1992	27									TBD
54	USNS Victorious (T-AGOS 19)	MT	Ocean Surveillance	Active	1991	28									TBD
55	USNS Effective (T-AGOS 21)	MT	Ocean Surveillance	Active	1991	28									TBD
56	USNS Sioux (T-ATF 171)	MT	Fleet Ocean Tug	Active	1980	39	Scrap				X				2021
57	USNS Apache (T-ATF 172)	MT	Fleet Ocean Tug	Active	1981	38	Scrap				X				2021
58	USNS Catawba (T-ATF 168)	MT	Fleet Ocean Tug	Active	1979	40	Retain		X						2019
59	USNS Mary Sears (T-AGS 65)	MT	Oceano-graphic Survey	Active	2000	19									TBD
60	USNS Bruce C. Heezen (T-AGS 64)	MT	Oceano-graphic Survey	Active	1999	20									TBD
61	USNS Henson (T-AGS 63)	MT	Oceano-graphic Survey	Active	1996	23									TBD
62	USNS Bowditch (T-AGS 62)	MT	Oceano-graphic Survey	Active	1994	25									TBD
63	USNS Pathfinder (T-AGS 60)	MT	Oceano-graphic Survey	Active	1993	26									TBD
64	USNS John Lenthall (T-AO 189)	MT	Fleet Oiler	Active	1986	33	Retain				X				2021
65	USNS Walter S. Diehl (T-AO 193)	MT	Fleet Oiler	Active	1987	32	Retain				X				2021
66	USNS John Ericsson (T-AO 194)	MT	Fleet Oiler	Active	1990	29									TBD
67	USNS Joshua Humphreys (T-AO 188)	MT	Fleet Oiler	Active	1986	33	Scrap					X			2022
68	USNS Henry J. Kaiser (T-AO 187)	MT	Fleet Oiler	Active	1985	34									TBD
69	USNS Pecos (T-AO 197)	MT	Fleet Oiler	Active	1989	30	Scrap							X	2023
70	USNS Laramie (T-AO 203)	MT	Fleet Oiler	Active	1995	24									TBD
71	USNS Leroy Grumman (T-AO 195)	MT	Fleet Oiler	Active	1988	31	Retain					X			2022
72	USNS Rappahannock (T-AO 204)	MT	Fleet Oiler	Active	1995	24									TBD
73	USNS Kanawha (T-AO 196)	MT	Fleet Oiler	Active	1990	29									TBD
74	USNS Yukon (T-AO 202)	MT	Fleet Oiler	Active	1993	26									TBD
75	USNS Patuxent (T-AO 201)	MT	Fleet Oiler	Active	1994	25									TBD
76	USNS Guadalupe (T-AO 200)	MT	Fleet Oiler	Active	1991	28									TBD
77	USNS Tippecanoe (T-AO 199)	MT	Fleet Oiler	Active	1992	27									TBD
78	USNS Big Horn (T-AO 198)	MT	Fleet Oiler	Active	1991	28									TBD
79	USNS Vadm K. R. Wheeler (T-AG 5001)	MT	Offshore Petroleum	Active	2007	12									TBD
80	USNS Salvor (T-ARS 52)	MT	Rescue/Salvage	Active	1984	35									TBD
81	USNS Grasp (T-ARS 51)	MT	Rescue/Salvage	Active	1985	34									TBD
82	USNS Seay (T-AKR 302)	MT	Large, Medium-Speed	Active	1998	21									TBD
83	USNS SGT William R. Button (T-AK 3012)	MT	Large, Medium-Speed	Active	1986	33									TBD
84	USNS 1st LT Jack Lummus (T-AK 3011)	MT	Large, Medium-Speed	Active	1986	33									TBD

United States Department of the Navy														
Military Sealift Command Active & Inactive Vessels														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
85	USNS 1st LT Baldomero Lopez (T-AK 3010)	MT	Large, Medium-Speed	Active	1985	34								TBD
86	USNS PFC Dewayne T. Williams (T-AK 3009)	MT	Large, Medium-Speed	Active	1985	34								TBD
87	USNS 2nd LT John P. Bobo (T-AK 3008)	MT	Large, Medium-Speed	Active	1985	34								TBD
88	USNS GYSGT Fred W. Stockham (T-AK 3017)	MT	Large, Medium-Speed	Active	1980	39								TBD
89	USNS Dahl (T-AKR 312)	MT	Large, Medium-Speed	Active	1998	21								TBD
90	USNS Piliiaau (T-AKR 304)	MT	Large, Medium-Speed	Active	2000	19								TBD
91	USNS Sisler (T-AKR 311)	MT	Large, Medium-Speed	Active	1998	21								TBD
92	Sea-Based X-Band Radar	MT	Semi-Submersible	Active	2006	13								TBD
93	USS Frank Cable (AS 40)	MT	Submarine tender	Active	1978	41								TBD
94	USS Emory S. Land (AS 39)	MT	Submarine Tender	Active	1977	42								TBD
95	USNS Maury (T-AGS-66)	MT	Surveying Ship	Active	2016	3								TBD
96	USNS Trenton (T-EPF 5)	MT	Expeditionary Fast	Active	2015	4								TBD
97	USNS Carson City (T-EPF 7)	MT	Expeditionary Fast	Active	2016	3								TBD
98	USNS Brunswick (T-EPF 6)	MT	Expeditionary Fast	Active	2016	3								TBD
99	USNS Lawrence H. Gianella (T-AOT 1125)	MT	Tanker	Active	1985	34	TBD							TBD
Legend		Disposition Summary				Planned Removal from Service Summary								
MT	Merchant Type Vessel		Retain	5			Avail for	Fiscal Year Removed from Service						
C	Combatant Vessel		SINKEX	0			Disposal	FY 19	FY 20	FY 21	FY 22	FY 23		
Active	Operating/Readiness/Support status		Foreign Military Sales	0			0	2	0	4	2	1		
Inactive	Non-operating/Non-retention status		Scrap	4										
X	Foreign Military Sales		Donation	0			Changes to vessel disposition status and retirement dates are in bold							
X	SINKEX		TBD	1										
X	Scrap		Total Inactive	0										
X	Donation		Total Active	99										
X	Remove From Service		Total Number of Ships*	99			* This represents the total number of vessels greater than 1,500 gross tons operated by MSC.							
MSC Ships Utilized by Other Organizations (Not Part of MSC Inventory)														
1	HST-2	MT	High Speed Transport	Util	2004	15	Leased to Bay Ferries Ltd. of Canada. Operates between Maine and N					TBD		
			Other Utilization*	1			* Represents MSC owned vessels utilized by other organizations.							
CHANGES IN VESSEL STATUS FROM THE PREVIOUS FISCAL YEAR														
1	USS Ponce (AFSB-15)	MT	Afloat Forward Staging Base	Inactive	1970	49	The vessel has been returned to the Navy and is listed on the Navy Inactive Ship list.							
2	USNS Lewis B Puller (MLP/AFSB 3)	MT	Expeditionary Sea Base	Inactive	2015	4	The vessel has been transferred to the Navy and is listed on the Navy Active ship list.							
3	USNS Lawrence H. Gianella (T-AOT 1125)	MT	Tanker	Active	1985	34	The vessel disposal disposition has been changed to TBD.							
4	USNS Puerto Rico (HST 2)	MT	High Speed Transport	Active	2004	15	The vessel was redesignated HST-2 in 2016 and leased to Bay Ferries Ltd. of Canada.							

APPENDIX F

United States Navy Inactive Ships – SEA 21I - List of Vessels

United States Department of the Navy														
Navy Inactive Ships Office - (SEA 21I)														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	Ex-Kitty Hawk (CV-63)	C	Aircraft Carrier	Inactive	1960	59	Scrap	X						2009
2	Ex-John F. Kennedy (CV-67)	C	Aircraft Carrier	Inactive	1967	52	Scrap	X						2007
3	Ex-Ponce (AFSB-15)	MT	Afloat Forward Staging Base	Inactive	1970	49	Scrap	X						2017
4	Ex-Peleliu (LHA-5)	MT	Amphibious Assault Ship	Inactive	1978	41	Retain							2015
5	Ex-Tarawa (LHA-1)	MT	Amphibious Assault Ship	Inactive	1973	46	Retain							2009
6	Ex-Nassau (LHA-4)	MT	Amphibious Assault Ship	Inactive	1978	41	Retain							2011
7	Ex-Charleston (LKA-113)	MT	Amphibious Cargo Ship	Inactive	1967	52	Scrap	X						2015
8	Ex-Durham (LKA-114)	MT	Amphibious Cargo Ship	Inactive	1968	51	SINKEX	X						1994
9	Ex-El Paso (LKA-117)	MT	Amphibious Cargo Ship	Inactive	1969	50	Scrap	X						1994
10	Ex-Mobile (LKA-115)	MT	Amphibious Cargo Ship	Inactive	1968	51	Scrap	X						1994
11	Ex-Shreveport (LPD-12)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X						2007
12	Ex-Dubuque (LPD-8)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X						2011
13	Ex-Denver (LPD-9)	MT	Amphibious Transport Dock	Inactive	1965	54	Scrap	X						2014
14	Ex-Nashville (LPD-13)	MT	Amphibious Transport Dock	Inactive	1967	52	Scrap	X						2009
15	Ex-Juneau (LPD-10)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X						2008
16	Ex-Cleveland (LPD-7)	MT	Amphibious Transport Dock	Inactive	1966	53	Scrap	X						2011
17	Ex-Charles F. Adams (DDG-2)	C	Destroyer	Inactive	1959	60	Scrap	X						1990
18	Ex-Barry (DD-933)	C	Destroyer	Inactive	1955	64	Scrap	X						1982
19	Ex-Ticonderoga (CG-47)	C	Guided Missile Destroyer	Inactive	1981	38	Scrap	X						2004
20	Ex-Yorktown (CG-48)	C	Guided Missile Destroyer	Inactive	1983	36	Scrap	X						2004
21	Ex-Vandegrift (FFG-48)	C	Guided Missile Frigate	Inactive	1982	37	Scrap	X						2015
22	Ex-Elrod (FFG-55)	C	Guided Missile Frigate	Inactive	1984	35	FMS	X						2015
23	Ex-Simpson (FFG-56)	C	Guided Missile Frigate	Inactive	1984	35	FMS	X						2015
24	Ex-Kauffman (FFG-59)	C	Guided Missile Frigate	Inactive	1986	33	FMS	X						2015
25	Ex-Rodney M. Davis (FFG-60)	C	Guided Missile Frigate	Inactive	1986	33	Scrap	X						2015
26	Ex-Ingraham (FFG-61)	C	Guided Missile Frigate	Inactive	1988	31	SINKEX	X						2015
27	Ex-De Wert (FFG-45)	C	Guided Missile Frigate	Inactive	1982	37	FMS	X						2014
28	Ex-Robert G. Bradley (FFG-49)	C	Guided Missile Frigate	Inactive	1983	36	FMS	X						2014

United States Department of the Navy														
Navy Inactive Ships Office - (SEA 211)														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
29	Ex-Halyburton (FFG-40)	C	Guided Missile Frigate	Inactive	1981	38	FMS	X						2014
30	Ex-Ford (FFG-54)	C	Guided Missile Frigate	Inactive	1984	35	SINTEX	X						2013
31	Ex-Klakring (FFG-42)	C	Guided Missile Frigate	Inactive	1982	37	FMS	X						2013
32	Ex-Carr (FFG-52)	C	Guided Missile Frigate	Inactive	1983	36	FMS	X						2013
33	Ex-Curts (FFG-38)	C	Guided Missile Frigate	Inactive	1982	37	SINTEX	X						2013
34	Ex-Samuel B Roberts (FFG-58)	C	Guided Missile Frigate	Inactive	1984	35	Scrap	X						2015
35	Ex-Nicholas (FFG-47)	C	Guided Missile Frigate	Inactive	1983	36	Scrap	X						2014
36	Ex-Underwood (FFG-36)	C	Guided Missile Frigate	Inactive	1982	37	Scrap	X						2013
37	Ex-John L Hall (FFG-32)	C	Guided Missile Frigate	Inactive	1981	38	Scrap	X						2012
38	Ex-Boone (FFG-28)	C	Guided Missile Frigate	Inactive	1980	39	Scrap	X						2012
39	Ex-Stephen W Groves (FFG-29)	C	Guided Missile Frigate	Inactive	1981	38	Scrap	X						2012
40	Ex-Hawes (FFG-53)	C	Guided Missile Frigate	Inactive	1984	35	Scrap	X						2010
41	Ex-Rainier (T-AOE 7)	MT	Fast Combat Support Ship	Inactive	1991	28	Retain							2016
42	Ex-Bridge (T-AOE-10)	MT	Fast Combat Support Ship	Inactive	1996	23	Retain							2014
43	Ex-Navajo (T-ATF 169)	MT	Fleet Ocean Tug	Inactive	1979	40	LSA	X						2016
44	Ex-Mohawk (T-ATF-170)	MT	Fleet Ocean Tug	Inactive	1980	39	Scrap	X						2015
45	Ex-Hayes (T-AGOR-16)	MT	Oceanographic Research	Inactive	1970	49	Scrap	X						2008
46	Ex-Safeguard (T-ARS 50)	MT	Rescue/Salvage	Inactive	1983	36	Retain							2017
47	Ex-Grapple (T-ARS 53)	MT	Rescue/Salvage	Inactive	1984	35	Retain							2017
48	Ex-Boulder (LST-1190)	MT	Tank Landing Ship	Inactive	1970	49	Scrap	X						1994
Legend		Disposition Summary				Planned Removal from Service Summary								
MT	Merchant Type Vessel		Retain	7				Avail for Disposal	Fiscal Year Removed from Service					
C	Combatant Vessel		SINTEX	4					FY 19	FY 20	FY 21	FY 22	FY 23	
Active	Operating/Readiness/Support status		Foreign Military Sales	8				41	0	0	0	0	0	
Inactive	Non-operating/Non-retention status		Scrap	28										
X	Foreign Military Sales		Logistics Support Asset	1				Changes to vessel disposition status and retirement dates are in bold						
X	SINTEX		Donation	0										
X	Logistics Support Asset		TBD	0										
X	Scrap		Total Inactive	48										
X	Donation													
X	Remove From Service		Total Number of Ships*	48										
* S1 represents the total number of Inactive vessels greater than 1,500 gross tons in the SEA 211 disposal queue. Not included for scrapping is Patrol Gunboat (PG) Canon which is less than 1,500 gross tons														
SEA 211 Ships Utilized by Other Organizations (Not Part of Inactive Fleet Inventory)														
1	Ex-Paul F. Foster (DD-964)	C	Destroyer	Util	1974	45	Retain	Self Defense Test Ship - NSWC Port Hueneme					2003	
2	Ex-Cassin Young (DD-793)	C	Destroyer	Util	1943	76	Retain	Utilized by the National Park Service					1960	
3	Ex-Narragansett (T-ATF-167)	MT	Fleet Ocean Tug	Util	1979	40	Retain	Utilized by Carrier Strike Group 4					1999	
4	Ex-McKee (AS-41)	MT	Submarine Tender	Util	1980	39	Retain	At Newport News Shipyard in preparation for radiological					1999	
			Other Utilization *	4				* Represents SEA 211 ships utilized by other organizations.						
CHANGES IN VESSEL STATUS FROM THE PREVIOUS FISCAL YEAR														
1	Ex-Shadwell (LSD-15)	MT	Dock Landing Ship	Inactive	1944	75	Completed in-place recycling at Little Sand Island in Mobile, AL in February 2018							
2	Ex-Doyle (FFG-39)	C	Guided Missile Frigate	Inactive	1982	37	The vessel departed Philadelphia, PA in June 2018 for recycling.							
3	USS Ponce (AFSB-15)	MT	Afloat Forward Staging Base	Inactive	1970	49	The vessel was added to the Navy Inactive Ship List							
4	Ex-St. Louis (LKA-116)	MT	Amphibious Cargo Ship	Inactive	1969	50	Disposed via SINTEX September 2018							
5	Ex-McClusky (FFG-41)	C	Guided Missile Frigate	Inactive	1982	37	Disposed via SINTEX July 2018							
6	Ex-Racine (LST-1191)	MT	Tank Landing Ship	Inactive	1970	49	Disposed via SINTEX July 2018							

APPENDIX G

United States Navy Office of Naval Research – List of Vessels

United States Department of the Navy Office of Naval Research - ONR														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	RV Sally Ride	MT	Research Vessel	Active	2015	4								2046
2	RV Neil Armstrong	MT	Research Vessel	Active	2014	5								2045
3	RV Atlantis	MT	Research Vessel	Active	1997	22								2042
4	RV Roger Revelle	MT	Research Vessel	Active	1996	23								2041
5	RV Thomas G Thompson	MT	Research Vessel	Active	1991	28								2036
6	RV Kilo Moana	MT	Research Vessel	Active	2002	17								2032
Legend		Disposition Summary			Planned Removal from Service Summary									
MT	Merchant Type Vessel		Retain	0				Avail for	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEK	0				Disposal	FY 19	FY 20	FY 21	FY 22	FY 23	
Active	Operating/Readiness/Support status		Foreign Military Sales	0				0	0	0	0	0	0	
Inactive	Non-operating/Non-retention status		Scrap	0										
X	Foreign Military Sales		Donation	0				Changes to vessel disposition status and retirement dates are in bold						
X	SINKEK		TBD	0										
X	Scrap		Total Inactive	0										
X	Donation		Total Active	6				* This represents the total number of vessels greater than 1,500 gross tons owned by						
X	Remove From Service		Total Number of Ships*	6				ONR						

APPENDIX H

National Oceanic and Atmospheric Administration – List of Vessels

National Oceanic and Atmospheric Administration - NOAA														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	Rainier	MT	Research Vessel	Active	1967	52								2028
2	Fairweather	MT	Research Vessel	Active	1968	51								2025
3	Thomas Jefferson	MT	Research Vessel	Active	1991	28								2028
4	Gordon Gunter	MT	Research Vessel	Active	1989	30								2025
5	Okeanos Explorer	MT	Research Vessel	Active	1988	31								2025
6	Oscar Elton Sette	MT	Research Vessel	Active	1987	32	Retain					X		2022
7	Hifalakai	MT	Research Vessel	Active	2002	17								2025
8	Reuben Lasker	MT	Research Vessel	Active	2012	7								TBD
9	Pisces	MT	Research Vessel	Active	2007	12								TBD
10	Oscar Dyson	MT	Research Vessel	Active	2004	15								TBD
11	Henry B. Bigelow	MT	Research Vessel	Active	2005	14								TBD
12	Bell M. Shimada	MT	Research Vessel	Active	2010	9								TBD
13	Ronald Brown	MT	Research Vessel	Active	1997	22								TBD
Legend		Disposition Summary				Planned Removal from Service Summary								
MT	Merchant Type Vessel	Retain		1			Avail for Disposal		Fiscal Year Removed from Service					
C	Combatant Vessel	SINKEX		0			Disposal	FY 19	FY 20	FY 21	FY 22	FY 23		
Active	Operating/Readiness/Support status	Foreign Military Sales		0			0	0	0	0	1	0		
Inactive	Non-operating/Non-retention status	Scrap		0										
X	Foreign Military Sales	Donation		0			Changes to vessel disposition status and retirement dates are in bold							
X	SINKEX	TBD		0										
X	Scrap	Total Inactive		0										
X	Donation	Total Active		13										
X	Remove From Service	Total Number of Ships*		13			* This represents the total number of vessels greater than 1,500 gross tons owned by NOAA							

APPENDIX I

National Science Foundation – List of Vessels

National Science Foundation - NSF														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	RV Sikuloaq	MT	Research Vessel	Active	2012	7								2044
2	RV Marcus Langseth	MT	Research Vessel	Active	1991	28								2030
Legend		Disposition Summary			Planned Removal from Service Summary									
MT	Merchant Type Vessel		Retain	0				Avail for	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEK	0				Disposal	FY 19	FY 20	FY 21	FY 22	FY 23	
Active	Operating/Readiness/Support status		Foreign Military Sales	0				0	0	0	0	0	0	
Inactive	Non-operating/Non-retention status		Scrap	0										
X	Foreign Military Sales		Donation	0				Changes to vessel disposition status and retirement dates are in bold						
X	SINKEK		TBD	0										
X	Scrap		Total Inactive	0										
X	Donation		Total Active	2										
X	Remove From Service		Total Number of Ships*	2				* This represents the total number of vessels greater than 1,500 gross tons owned by NSF						

APPENDIX J

United States Coast Guard – List of Vessels

United States Coast Guard - USCG														
No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 19	FY 20	FY 21	FY 22	FY 23	
1	Midgett WHEC 726	MT	High Endurance Cutter	Active	1971	48								TBD
2	Mellon WHEC 717	MT	High Endurance Cutter	Active	1967	52								TBD
3	Munro WMSL-724	MT	High Endurance Cutter	Active	1971	48								TBD
4	Polar Sea WAGB-11	MT	Heavy Ice Breaker	Inactive	1977	42	Retain							TBD
5	Polar Star WAGB-10	MT	Heavy Ice Breaker	Active	1976	43								TBD
6	Forward WMEC 911	MT	Medium Endurance Cutter	Active	1989	30								TBD
7	Alex Haley WMEC-39	MT	Medium Endurance Cutter	Active	1968	51								TBD
8	Bear WMEC 901	MT	Medium Endurance Cutter	Active	1980	39								TBD
9	Escañaba WMEC 907	MT	Medium Endurance Cutter	Active	1985	34								TBD
10	Harriet Lane WMEC 903	MT	Medium Endurance Cutter	Active	1984	35								TBD
11	Legare WMEC 912	MT	Medium Endurance Cutter	Active	1989	30								TBD
12	Mohawk WMEC 913	MT	Medium Endurance Cutter	Active	1989	30								TBD
13	Northland WMEC 904	MT	Medium Endurance Cutter	Active	1982	37								TBD
14	Seneca WMEC 906	MT	Medium Endurance Cutter	Active	1984	35								TBD
15	Spencer WMEC 905	MT	Medium Endurance Cutter	Active	1984	35								TBD
16	Tahoma WMEC 908	MT	Medium Endurance Cutter	Active	1987	32								TBD
17	Tampa WMEC 902	MT	Medium Endurance Cutter	Active	1984	35								TBD
18	Thetis WMEC 910	MT	Medium Endurance Cutter	Active	1986	33								TBD
19	Campbell WMEC 909	MT	Medium Endurance Cutter	Active	1986	33								TBD
20	Kimball WMSL 756	MT	National Security Cutter	Active	2017	2								TBD
21	Bertholf WMSL 750	MT	National Security Cutter	Active	2006	13								TBD
22	Waesche WMSL 751	MT	National Security Cutter	Active	2008	11								TBD
23	Stratton WMSL 752	MT	National Security Cutter	Active	2010	9								TBD
24	Hamilton WMSL 753	MT	National Security Cutter	Active	2013	6								TBD
25	James WMSL 754	MT	National Security Cutter	Active	2014	5								TBD
26	Munro WMSL-755	MT	National Security Cutter	Active	2015	4								TBD
27	Mackinaw WLBB-30	MT	Heavy Ice Breaker	Active	2005	14								TBD
28	Healy WAGB-20	MT	Medium Icebreaker	Active	1997	22								TBD
29	Barque EAGLE (WIX 327)	MT	Multi-Use Heritage	Active	1936	83								TBD
30	Juniper (WLB 201)	MT	Buoy Tender Seagoing	Active	1995	24								2026
31	Willow (WLB 202)	MT	Buoy Tender Seagoing	Active	1996	23								2026
32	Kukui (WLB 203)	MT	Buoy Tender Seagoing	Active	1997	22								2027
33	Elm (WLB 204)	MT	Buoy Tender Seagoing	Active	1998	21								2028
34	Walnut (WLB 205)	MT	Buoy Tender Seagoing	Active	1998	21								2029
35	Spar (WLB 206)	MT	Buoy Tender Seagoing	Active	2000	19								2031
36	Maple (WLB 207)	MT	Buoy Tender Seagoing	Active	2001	18								2031
37	Aspen (WLB 208)	MT	Buoy Tender Seagoing	Active	2001	18								2031
38	Sycamore (WLB 209)	MT	Buoy Tender Seagoing	Active	2001	18								2032
39	Cypress (WLB 210)	MT	Buoy Tender Seagoing	Active	2001	18								2032
40	Oak (WLB 211)	MT	Buoy Tender Seagoing	Active	2002	17								2032
41	Hickory (WLB 212)	MT	Buoy Tender Seagoing	Active	2003	16								2033
42	Fir (WLB 213)	MT	Buoy Tender Seagoing	Active	2003	16								2033
43	Hollyhock (WLB 214)	MT	Buoy Tender Seagoing	Active	2003	16								2033
44	Sequoia (WLB 215)	MT	Buoy Tender Seagoing	Active	2003	16								2033
45	Alder (WLB 216)	MT	Buoy Tender Seagoing	Active	2004	15								2034
Legend														
MT	Merchant Type Vessel		Retain	0				Avail for	Fiscal Year Removed from Service					
C	Combatant Vessel		SINEX	0				Disposal	FY 19	FY 20	FY 21	FY 22	FY 23	
Active	Operating/Readiness/Support status		Foreign Military Sales	0				0	0	0	0	0	0	
Inactive	Non-operating/Non-retention status		Scrap	0										
X	Foreign Military Sales		Donation	0				Changes to vessel disposition status and retirement dates are in bold						
X	SINEX		TBD	0										
X	Scrap		Total Inactive	1										
X	Donation		Total Active	44										
X	Remove From Service		Total Number of Ships*	45				* This represents the total number of vessels greater than 1,500 gross tons owned by USCG						
CHANGES IN VESSEL STATUS FROM THE PREVIOUS FISCAL YEAR														
1	USS Oak Ridge	MT	Floating Dry-Dock	Active	1944	75	In 2018 the Coast Guard determined the Floating Dry-Dock was not a vessel. Oak Ridge was sold at auction by the GSA in September of 2018. The dock is currently in commercial service in New Port News, VA.							
2	Sherman WHEC 720	MT	High Endurance Cutter	Active	1967	52	The vessel was transferred to the Sri Lanka Navy in August of 2018							
3	Midgett WHEC 726	MT	High Endurance Cutter	Active	1971	48	The vessel retirement date was changed to TBD							
4	Mellon WHEC 717	MT	High Endurance Cutter	Active	1967	52	The vessel retirement date was changed to TBD							
5	Munro WMSL-724	MT	High Endurance Cutter	Active	1971	48	The vessel retirement date was changed to TBD							
6	Vessels No. 29-45	MT		Active			These vessels were added to the list of USCG vessels in FY-2018							