OFFICE OF SHIP DISPOSAL PROGRAMS

ANNUAL REPORT
FOR
FISCAL YEAR 2017

January 2018

U. S. Department of Transportation

Maritime Administration

MARITIME ADMINISTRATION

OFFICE OF SHIP DISPOSAL PROGRAMS

TABLE OF CONTENTS

OFFICE OF SHIP DISPOSAL PROGRAMS

ANNUAL REPORT FOR FISCAL YEAR 2017

EXECUTIVE SUMMARY

The Maritime Administration (MARAD) publishes this report annually to provide previous Fiscal Year information on the disposition of MARAD's 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 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 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 2017, there were 13 non-retention ships remaining in 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 2017 includes exceeding the annual cumulative target requirements in each year of the March 2010 California Consent Decree for the removal of non-retention vessels from the Suisun Bay Reserve (SBRF), located north of San Francisco, CA. At the beginning of FY 2017, 55 of 57 SBRF vessels listed in the Consent Decree, 96 percent had been removed from the SBRF for disposal, leaving two remaining ships to be removed by the September 30, 2017 deadline. MARAD completed the removal of the remaining two SBRF vessels in July of 2017 ahead of the Consent Decree deadline.[1]

NON-RETENTION VESSEL REMOVALS FROM THE NDRF IN FY 2017

In FY 2017, MARAD removed for disposal a total of two obsolete NDRF vessels both from the SBRF. Table 1 below identifies the fleet, date and name of the vessels removed for disposal in FY 2017.

Table 1: Vessel Removals in FY 2017

Vessels Removed in FY 2017				
Fleet	Month Removed	Date Removed	Vessel	Contract Type
SBRF	July	7/18/2017	CAPE BRETON	Service
SBRF	July	7/25/2017	CAPE BORDA	Service

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

[1] The March 2010 Consent Decree can be found at http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/suisunbay_decree.pdf

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 2017, MARAD awarded two single best value ship recycling service contracts for the two SBRF vessels, which returned the lowest offered single ship price revision. MARAD also awarded two single ship dry-dock service contracts for the SBRF vessels to remove biofouling from the vessel underwater hulls prior to tow for recycling. In addition, MARAD awarded a single lot best value recycling service contract for the two James River Reserve Fleet (JRRF) vessels, which returned the lowest single lot price revision for both vessels. MARAD procured recycling and shipyard services using appropriated funds in the amount of $3,602,240 for the award, removal, dry-docking and dismantlement of the four non-retention vessels awarded in FY 2017.

SALES REVENUE AND DISTRIBUTION

MARAD offered all four vessels awarded in FY 2017 for sale but due to the price of scrap steel, the long tow from the SBRF, the small size of the HARKNESS and mud ballast on the CAPE JOHNSON, was unable to sell any of the vessels for recycling. Therefore, MARAD had no sales revenues in FY 2017. 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 Vessel Operations Revolving Fund (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 fiscal year to the NPS shall be set aside for preservation and presentation to the public of maritime heritage property of the Maritime Administration.

In FY 2017, approximately $5,869,773 was obligated to Ready Reserve Fleet (RRF) vessels for repair and maintenance activities. Funds obligated to the USMMA and the six SMA totaled $789,241. MARAD provided $5,035,398 to the NPS to support maritime heritage projects selected by the NPS in the NMGHP. MARAD expended $1,738,917 in FY 2017 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

[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.

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 December 2016, 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 United States Coast Guard (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 current collapses 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. In February 2017, MARAD hosted a budget rollout teleconference for the ship recycling industry whereby the Maritime Administrator presented the President's FY 2018 budget proposal.

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 2017, MARAD canvassed each Agency requesting updates to their FY 2016 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 2018-2022.

NUCLEAR SHIP SAVANNAH

The NSS, the world's first nuclear-powered merchant ship, is a retention vessel, administered by the OSDP. Conceived, constructed, and operated by MARAD under the Eisenhower Administration's Atoms for Peace program. The NSS is a legacy asset maintained in protective storage in Baltimore, MD; licensed and inspected by the United States (U.S.) NRC under the authority of a license first issued by the former Atomic Energy Commission (AEC) in 1965. In 1976, after the ship was removed from service and its nuclear facilities were mothballed, the license was modified to permit MARAD to possess but not operate or dismantle the nuclear power plant. The license continues in effect until the nuclear power plant is decommissioned and the license terminated. 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.

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 17-year period since FY 2001, MARAD awarded disposal contracts for 219 obsolete ships, removed 221 ships from MARAD and Navy NISMO fleet sites and completed disposal action on 220 ships. During this period, 135 ships were downgraded from retention to non-retention status and added to the disposal queue. At the start of FY 2017, there were only 18 ships designated as non-retention and available for disposal.[3] It is anticipated that an additional two to four 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 facilities in Texas and Louisiana. As scrap metal prices

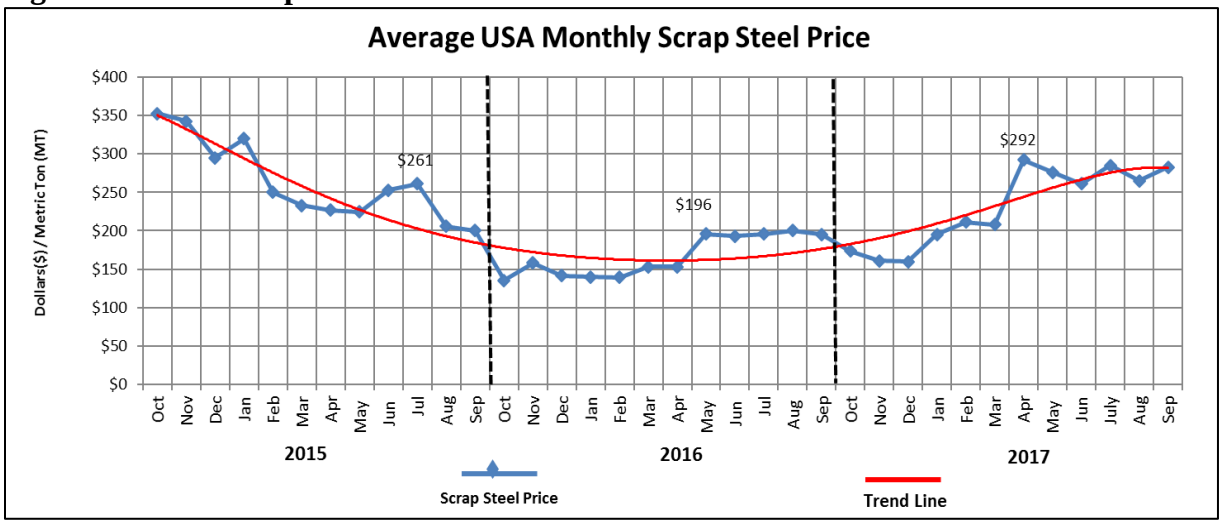
[3] The 18 ships consisted of 15 MARAD vessels in the NDRF and three Navy vessels located in the NISMO in Philadelphia, PA.

fall, the total amount paid for each vessel also falls as the volatility in the scrap metal 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.

In FY 2017, MARAD issued two separate ship recycling sale announcements for a total of four vessels. MARAD was unable to sell a single vessel and instead awarded service contracts for the recycling of the four vessels. While scrap steel prices rebounded somewhat in FY 2017 the projected revenue from the sale of recyclable materials was insufficient to cover the recyclers costs of removing, towing and disposing of the last two Consent Decree vessels from the SBRF. In addition, two vessels in the JRRF, were offered for sale as a single lot but did not sell due to the small size of one ship and the presence of mud ballast in four double bottom tanks on the larger ship.

Figure A depicts the volatility in the U.S. scrap steel prices during FY's 2015 - 2017. The domestic scrap steel market entered a downward spiral after reaching its $400 per metric ton peak in January 2014 with the most dramatic decline occurring in 2015. In January 2015, scrap steel prices were approximately $320 per metric ton and by October 2015 had dropped to a low of approximately $135 per metric ton; a 58 percent 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. In May 2016, prices rose to $200 per metric ton then limped along in the $190's per metric ton range through August before declining to $174 per metric ton by the end of October. In February 2017, scrap steels prices crossed the $200 per metric ton threshold and by April had reached the $292 per metric ton. From May through September they hovered in the $260-$285 per metric ton range.[4]

Figure A: USA Scrap Steel Price Trends FY's 2015-2017



Source data for the Average USA Monthly Scrap Steel Price Trend chart is compiled from: The Scrap Register

[4] MARAD Monthly Average USA Scrap Steel Price Trend Report

(http://www.scrapregister.com); Recycler's World, (http://www.recycle.net); Steel Insight (http://www.steel-insight.com); and United States Steel Corporation (https://www.ussteel.com) and www.worldsteel.org

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 2017 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 bio-geographical 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

[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.

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 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 2017, 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 2017. 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 tow 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, is finishing the dismantlement of the Ex-RANGER and since its arrival in June, is actively dismantling the Ex-INDEPENDENCE. ASM completed the dismantlement of the Ex-FORRESTAL in 2015. They have been active in the commercial ship recycling market as well as recycling MARAD vessels. They are currently dismantling the last two SBRF vessels removed under the Consent Decree, the CAPE BRETON and CAPE BORDA and will be recycling the two JRRF vessels awarded in September of 2017. ESCO Marine, Inc., (ESCO) court supervised re-organization culminated on May 1, 2017, with the novation of the two MARAD and Navy ship recycling contracts from ESCO Marine, Inc. to HRP. HRP has re-started ship recycling operations at the former ESCO

[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.

facility and is actively recycling the Navy aircraft carrier Ex-SARATOGA, and the two former MARAD vessels SHENANDOAH and YELLOWSTONE.

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 projected number of Federal vessel retirements during the next five years and the encouraging rebound in the price of scrap steel. However, there is continuing concern that the current available industrial capacity and competition for MARAD's vessels will decrease if two additional Navy aircraft carriers are awarded for dismantlement in the next two years. 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 2017, 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.

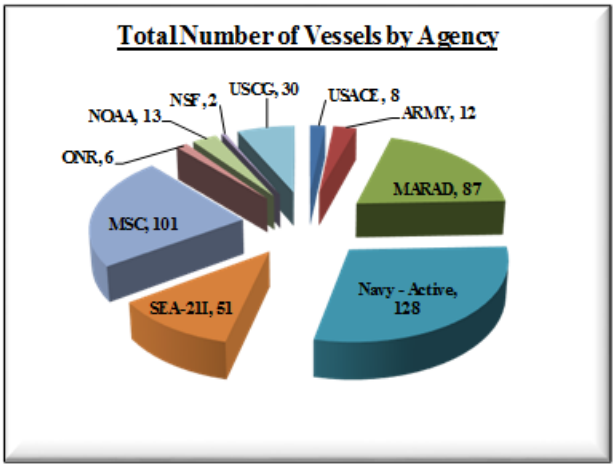
This report does not distinguish Navy Battle Force Ships from Non-Battle Force Ships. Battle Force Ships are commissioned United States Ship (USS) warships capable of contributing to combat operations, or a United States Naval Ship (USNS) that contributes directly to Navy warfighting or support missions.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

[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.

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

Active and Inactive Vessels by Agency			
Agency	Active	Inactive	Total Ships
USACE	8	0	8
ARMY	12	0	12
MARAD	76	11	87
NAVY			
Navy - Active	127	1	128
SEA-21I	0	51	51
MSC	100	1	101
ONR	6	0	6
NOAA	13	0	13
NSF	2	0	2
USCG	29	1	30
Total	**373**	**65**	**438**



The largest concentration of active and Inactive vessels is within the Navy. The total number of active and Inactive vessels within the Navy is 286 or 65 percent of the total. MARAD is second with 87 active and Inactive vessels representing 20 percent of the total. Combined MARAD and Navy account for 373 active and Inactive vessels or 85 percent of the total.

Figure C: Inactive Vessels by Agency

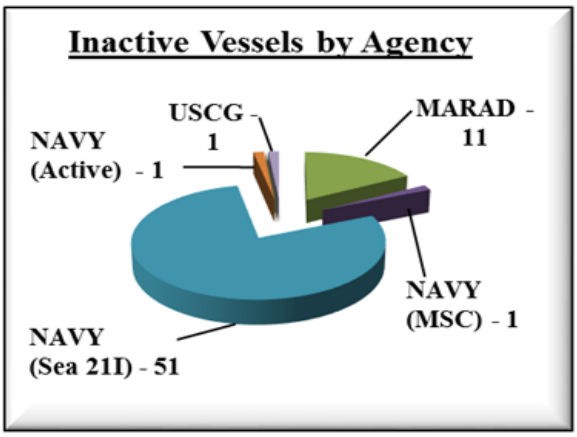


Figure C identifies each agency's portion of the 65 vessels designated as inactive. SEA21I lists 51 vessels as inactive of which 13 are still in retention status, and one vessel is being utilized as a logistics support vessel, leaving 37 vessels designated for disposal. Of the 37 one is on hold for donation, seven are targeted for Deep Sink Exercises (SINKEX), 10 are earmarked for Foreign Military Sales and 19 are scheduled for scrap. MARAD has 11 vessels designated as inactive (non-retention) and available for disposal. There is one vessel each at Navy - Active, USCG and MSC designated as inactive however, none are available for disposal. MARAD's 11 vessels represent 17 percent of the inactive vessels while the Navy SEA 211's 51 vessels represent 78 percent of the inactive vessels. Combined MARAD and SEA 211 have 62 vessels or 95 percent of the total vessels

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

designated as inactive. MARAD has 11 non-retention vessels available for disposal through recycling while SEA 21I has designated 19 vessels for recycling. The total number of MARAD and Navy vessels targeted for and available for recycling is 30.

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	Tripoli	MT	Amphibious Assault Ship	Inactive	1966	51	Scrap	X
2	Cape Florida	MT	Break Bulk	Inactive	1971	46	Scrap	X
3	Cape Gibson	MT	Break Bulk	Inactive	1968	49	Scrap	X
4	Cape Archway	MT	Break Bulk	Inactive	1963	54	Scrap	X
5	Cape Alexander	MT	Break Bulk	Inactive	1962	55	Scrap	X
6	Cape Alava	MT	Break Bulk	Inactive	1962	55	Scrap	X
7	Equality State	MT	Crane Ship	Inactive	1962	55	Scrap	X
8	Observation Island	MT	Missile Instrumentation	Inactive	1954	63	Scrap	X
9	Cape Lobos	MT	Roll-On/Roll-Off	Inactive	1972	45	Scrap	X
10	Simon Lake	MT	Submarine Tender	Inactive	1964	53	Scrap	X
11	Sumner	MT	Surveying Ship	Inactive	1992	25	Scrap	X

Navy Inactive Ships Office (SEA 21I)

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	57	Scrap	X
2	Ex-John F. Kennedy (CV-67)	C	Aircraft Carrier	Inactive	1967	50	Scrap	X
3	Ex-Charleston (LKA-113)	MT	Amphibious Cargo Ship	Inactive	1967	50	Scrap	X
4	Ex-Durham (LKA-114)	MT	Amphibious Cargo Ship	Inactive	1968	49	SINKEX	X
5	Ex-St. Louis (LKA-116)	MT	Amphibious Cargo Ship	Inactive	1969	48	SINKEX	X
6	Ex-El Paso (LKA-117)	MT	Amphibious Cargo Ship	Inactive	1969	48	Scrap	X
7	Ex-Mobile (LKA-115)	MT	Amphibious Cargo Ship	Inactive	1968	49	Scrap	X
8	Ex-Shreveport (LPD-12)	MT	Amphibious Transport Dock	Inactive	1966	51	Scrap	X
9	Ex-Charles F. Adams (DDG-2)	C	Destroyer	Inactive	1959	58	Donation	X
10	Ex-Barry (DD-933)	C	Destroyer	Inactive	1955	62	Scrap	X
11	Ex-Ticonderoga (CG-47)	C	Guided Missile Destroyer	Inactive	1981	36	Scrap	X
12	Ex-Yorktown (CG-48)	C	Guided Missile Destroyer	Inactive	1983	34	Scrap	X
13	Ex-Vandegrift (FFG-48)	C	Guided Missile Frigate	Inactive	1982	35	FMS	X
14	Ex-Elrod (FFG-55)	C	Guided Missile Frigate	Inactive	1984	33	FMS	X
15	Ex-Simpson (FFG-56)	C	Guided Missile Frigate	Inactive	1984	33	FMS	X
16	Ex-Kauffman (FFG-59)	C	Guided Missile Frigate	Inactive	1986	31	FMS	X
17	Ex-Rodney M. Davis (FFG-60)	C	Guided Missile Frigate	Inactive	1986	31	FMS	X
18	Ex-McClusky (FFG-41)	C	Guided Missile Frigate	Inactive	1982	35	SINKEX	X
19	Ex-Ingraham (FFG-61)	C	Guided Missile Frigate	Inactive	1988	29	SINKEX	X
20	Ex-De Wert (FFG-45)	C	Guided Missile Frigate	Inactive	1982	35	FMS	X
21	Ex-Robert G. Bradley (FFG-49)	C	Guided Missile Frigate	Inactive	1983	34	FMS	X
22	Ex-Halyburton (FFG-40)	C	Guided Missile Frigate	Inactive	1981	36	FMS	X
23	Ex-Ford (FFG-54)	C	Guided Missile Frigate	Inactive	1984	33	SINKEX	X
24	Ex-Klakring (FFG-42)	C	Guided Missile Frigate	Inactive	1982	35	FMS	X
25	Ex-Carr (FFG-52)	C	Guided Missile Frigate	Inactive	1983	34	FMS	X
26	Ex-Curts (FFG-38)	C	Guided Missile Frigate	Inactive	1982	35	SINKEX	X
27	Ex-Samuel B Roberts (FFG-58)	C	Guided Missile Frigate	Inactive	1984	33	Scrap	X
28	Ex-Nicholas (FFG-47)	C	Guided Missile Frigate	Inactive	1983	34	Scrap	X
29	Ex-Underwood (FFG-36)	C	Guided Missile Frigate	Inactive	1982	35	Scrap	X
30	Ex-John L Hall (FFG-32)	C	Guided Missile Frigate	Inactive	1981	36	Scrap	X
31	Ex-Boone (FFG-28)	C	Guided Missile Frigate	Inactive	1980	37	Scrap	X
32	Ex-Stephen W Groves (FFG-29)	C	Guided Missile Frigate	Inactive	1981	36	Scrap	X
33	Ex-Hawes (FFG-53)	C	Guided Missile Frigate	Inactive	1984	33	Scrap	X
34	Ex-Mohawk (T-ATF-170)	MT	Fleet Ocean Tug	Inactive	1980	37	Scrap	X
35	Ex-Hayes (T-AGOR-16)	MT	Oceanographic Research	Inactive	1970	47	Scrap	X
36	Ex-Boulder (LST-1190)	MT	Tank Landing Ship	Inactive	1970	47	Scrap	X
37	Ex-Racine (LST-1191)	MT	Tank Landing Ship	Inactive	1970	47	SINKEX	X

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	0
SINKEX	7
Foreign Military Sales	10
Scrap	30
Donation	1
TBD	0
Total Inactive	48
Total Active	0
Total Number of Ships	48

The Disposition Summary totals are inclusive of both MARAD and Sea 21I vessels.

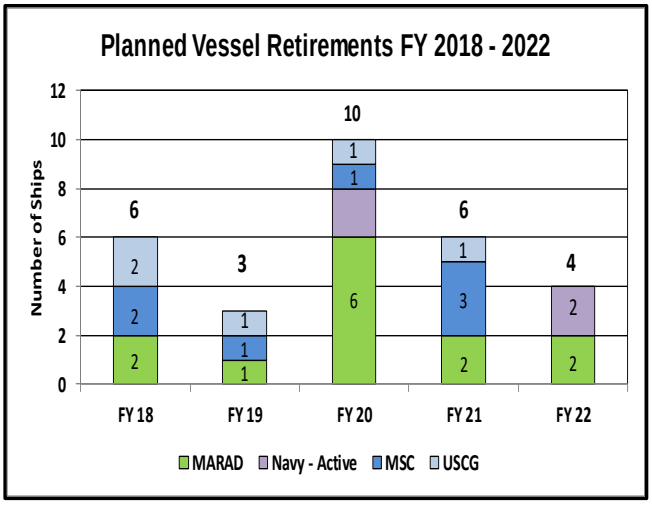
Planned Vessel Retirement Schedules

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 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 2018-2022 for each agency. Figure F provides a listing by each agency of the vessels planned for service retirement in FY's 2018-2022.

Figure E: Vessel Service Retirement Summary by Agency FY 2018- 2022

Agency	Fiscal Year Removed from Service					5-Year
	FY 18	FY 19	FY 20	FY 21	FY 22	Total
USACE	0	0	0	0	0	0
ARMY	0	0	0	0	0	0
MARAD	2	1	6	2	2	13
NAVY						
Navy - Active	0	0	2	0	2	4
SEA 21I	0	0	0	0	0	0
MSC	2	1	1	3	0	7
ONR	0	0	0	0	0	0
NOAA	0	0	0	0	0	0
NSF	0	0	0	0	0	0
USCG	2	1	1	1	0	5
FY Removal	**6**	**3**	**10**	**6**	**4**	
	Total 5-Year Removed from Service					**29**



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 FYs 2018 – 2022

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 18	FY 19	FY 20	FY 21	FY 22	
1	FB-62	MT	Barge Office	Active	1944	73	Scrap				X			2020
2	Cape Girardeau	MT	Break Bulk	Active	1968	49	Scrap				X			2020
3	Cape Jacob	MT	Break Bulk	Active	1961	56	Scrap				X			2020
4	Cape Juby	MT	Break Bulk	Active	1962	55	Scrap					X		2021
5	Cape Nome	MT	Break Bulk	Active	1969	48	Scrap						X	2022
6	Cape Avinof	MT	Break Bulk	Active	1963	54	Scrap		X					2018
7	Cape Ann	MT	Break Bulk	Active	1962	55	Scrap			X				2019
8	Cape Bover	MT	Break Bulk	Active	1966	51	Scrap				X			2020
9	Diamond State	MT	Crane Ship	Active	1960	57	Scrap				X			2020
10	Triumph	MT	Surveillance Ship	Active	1984	33	Scrap				x			2020
11	Petersburg	MT	Tanker	Active	1963	54	Scrap					x		2021
12	Chesapeake	MT	Tanker	Active	1964	53	Scrap		X					2018
13	Empire State	MT	Training Ship	Active	1962	55	Scrap						x	2022

United States Department of the Navy - MSC

No.	Name	Type	Vessel Design	Status	Year Built	Age	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
									FY 18	FY 19	FY 20	FY 21	FY 22	
1	USS Ponce (AFSB-15)	MT	loat Forward Staging Ba	Active	1970	47	Scrap		X					2018
2	USNS Sioux (T-ATF 171)	MT	Fleet Ocean Tug	Active	1980	37	Scrap					X		2021
3	USNS Apache (T-ATF 172)	MT	Fleet Ocean Tug	Active	1981	36	Scrap					X		2021
4	USNS Catawba (T-ATF 168)	MT	Fleet Ocean Tug	Active	1979	38	Retain			X				2019
5	USNS John Lenthall (T-AO 189)	MT	Fleet Oiler	Active	1986	31	Scrap					X		2021
6	USNS Walter S. Diehl (T-AO 193)	MT	Fleet Oiler	Active	1987	30	Retain				X			2020
7	USNS Lawrence H. Gianella (T-AOT 1125)	MT	Tanker	Active	1985	32	Retain		X					2018

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 18	FY 19	FY 20	FY 21	FY 22	
1	USS Bunker Hill (CG 52)	C	Guided Missile Cruiser	Active	1985	32	Retain				X			2020
2	USS Mobile Bay (CG 53)	C	Guided Missile Cruiser	Active	1985	32	Retain				X			2020
3	USS Antietam (CG 54)	C	Guided Missile Cruiser	Active	1986	31	Retain						X	2022
4	USS Leyte Gulf (CG 55)	C	Guided Missile Cruiser	Active	1986	31	Retain						X	2022

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 18	FY 19	FY 20	FY 21	FY 22	
1	USS Oak Ridge	MT	Floating Dry-Dock	Active	1944	74	TBD		X					2018
2	Sherman WHEC 720	MT	High Endurance Cutter	Active	1967	51	TBD		X					2019
3	Midgett WHEC 726	MT	High Endurance Cutter	Active	1971	47	TBD			X				2019
4	Mellon WHEC 717	MT	High Endurance Cutter	Active	1967	51	TBD				X			2020
5	Munro WHEC 724	MT	High Endurance Cutter	Active	1971	47	TBD					X		2021

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	7
SINKEX	0
Foreign Military Sales	0
Scrap	17
Donation	0
TBD	5
Total In-Active	0
Total Active	29
Total Number of	29

FY 2018 Avail for Disposal	Planned Removal from Service Summary: Fiscal Year Removed from Service FY 18	FY 19	FY 20	FY 21	FY 22	5 -Year Total
0	6	3	10	6	4	29

* 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 ulitilty, appropriations and availabilitty of replaement vessels where applicable.

European Ship Recycling Regulation

In May of 2016, MARAD participated in a teleconference with representatives of the European Commission (EU), the NGO Shipbreaking Platform, the Basel Action Network, U.S. State Department, EPA and U.S. ship recyclers. The purpose of the teleconference was to learn about the implementation of the EU's Ship Recycling Regulation and the incorporation of North American recyclers on the European Union List of Approved recyclers. 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/scrapping 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 were required to submit facility applications to the EU by July 1st, 2016. The EU will have a third party organization conduct the application evaluations and site visit inspections. The EU anticipates beginning the site visits inspections in early 2017 with a goal of finalizing the list of facilities in March.

There is no timetable for the EU Commission to submit its recommendations for the proposed ship recycling financing scheme to the EU Parliament. The timetable for the implementation of the Ship Recycling Regulations and license scheme is unknown. Approval of the EU member states is required prior to implementation and consent is a process that is expected take 1-2 years. In the interim the EU hopes EU flag carriers will voluntarily utilize EU approved recycling facilities for ship recycling.

The EU adopted the first version of approved European ship recycling facilities in December 2016. The eighteen approved European facilities were located in Belgium (1), Denmark (2), France (3), Latvia (1), Lithuania (3), The Netherlands (2), Poland (1), Portugal (1), Spain (1) and the United Kingdom (3). The posted list of European ship recycling facilities can be found at; http://ec.europa.eu/environment/waste/ships/list.htm. The EU has not yet posted a list of approved non-European ship recycling facilities.

Environmental Stewardship

MARAD has 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 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 tow 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 Clean Water Act (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 209 ships awarded in recycling contracts represent 95% of the 219 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.

Table 2: Vessel Awards by Fiscal Year

Vessel Awards by Disposal Option by Fiscal Year																		
Type of Disposal	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	Totals
Recycling (Fee for Service)	5	2	15	11	16	13	14	4	8	11	10	0	0	3	2	1	4	119
Recycling (Sales)	0	0	0	2	1	5	4	16	5	0	8	16	19	8	5	1	0	90
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	219

Through September 30, 2017

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 recycling contracts in FYs 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 2016-2017 and minimal appropriations to fund ship recycling service contracts have mitigated industrial capacity shortages but remain the prevalent influences in the lack of competition for contract awards.

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 101 vessels for recycling from November 2008 through FY 2017 from NDRF and Navy fleet sites. Of the 101 awards, 62 were sales and 39 were service contracts and 82%, (83 of 101), 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 82% 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 2011-2017 and the apportionments to the NSS for FY's 2015-2017.[10]

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**
Appropriation	$12.0M	$2.5M	$2.4M	$2.0M	$2.0M /1	$3.0M /2	$7.0M /3

/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.

[10] In FY 2017 The NSS received a separate line item appropriation in the amount of $24M to commence the decommissioning of the de-fueled nuclear power plant on board the vessel.

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 spending down 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 is estimated at $2.7M and will be utilized to prepare a high priority JRRF vessel for disposal in FY 2018.

Vessel Sales Revenues

Accrued revenue from the sale of non-retention NDRF vessels over the past eight years (FY 2010-2017) has been approximately $67 million for dismantling/recycling of 57 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 2010-2017. 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. 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.

The price of scrap steel trended higher in the latter half of FY 2017 and coupled with an increasingly positive domestic economic outlook MARAD is optimistic for increased vessel sales for recycling in FY's 2018-2019.

In the absence of vessel sales in FY 2017 the only funds credited to the VORF in FY 2017 were the result of liquidated damages, in the amount of $1,863, assessed for late performance in the completion of a ship recycling contract. Accrued revenue from the sale of non-retention NDRF vessels over the past eight fiscal years (FY's 2010-2017) has been approximately $67 million for the dismantling/recycling of 57 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**	**TOTAL**
Annual Sales Revenue ($):	$0	$7.6M	$18.9M	$24.6M	$9.8M	$6.1M	$52K	$0	**$67M**
Vessel Sales Contracts:	0	8	16	19	8	5	1	0	**57**
Vessel Service Contracts:	12	10	0	0	3	2	1	4	**32**
Total Recycling Contracts:	**12**	**18**	**16**	**19**	**11**	**7**	**2**	**4**	**89**

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 2017, MARAD issued two separate ship recycling sale announcements for a total of four vessels. Due to the volatile scrap steel market MARAD was unable to sell a single vessel and instead had to award service contracts for the recycling of the four vessels. While scrap steel prices rebounded somewhat in FY 2017 the projected revenue from the sale of recyclable materials was insufficient to cover the recyclers costs of removing, towing and disposing of the last two Consent Decree vessels from the SBRF. In addition, two vessels in the JRRF were

offered for sale but did not sell due to the small size of one ship and the presence of mud ballast in four of the double bottom tanks on the large ship.[11]

National Maritime Heritage Act – Amended by the FY 2017 NDAA

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) <u>Set Aside</u> - 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.*[12]
>
> *(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 2016 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 2016 end of fiscal year balance of funds for the specified VORF sub-accounts is listed in Table 5.

[11] The larger ship contained mud ballast, which is used as permanent ballast on board a vessel to assist with a vessel trim and stability. It is a form of drilling mud that may contain heavy metals and other contaminants. Removal of the mud ballast is accomplished during the ship recycling process, by hand, rendering removal and disposal costly and very labor intensive.

[12] 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 out the NMHGP. Not less than 25% of the funds designated to the NPS are to be <u>set aside</u> for preservation and presentation to the public of maritime heritage property of the Maritime Administration.

Table 5: FY 2016 Fiscal Year End VORF Sub-Account Balances

Vessel Operating Revolving Fund	
Sub-Account Balances	
VORF A (NDRF)	$5,970,417
VORF B (SMA's & USMMA)	$2,126,925
VORF C1 (NPS)	$4,959,152
VORF C2 (MARAD)	$2,286,817
Suspense Account	$4,263,952
Total	$19,607,263

Amounts reflect fund totals as of September 30, 2016.

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.

VORF Obligations and Funds Provided

In FY 2017, funds in the suspense account totaling $4,263,952 became eligible for distribution when claims against the funds were extinguished. These funds were allocated to the various NMHA sub-accounts. The collected liquidated damages in the amount of $1,863 were credited to the NMHA sub-accounts. MARAD recovered a total of $714,753 from unexpended obligations during prior year contract closeout actions. These funds were credited back to the originating VORF sub-account.

Table 6 provides a summary of the transactions within each VORF sub-account in FY 2017. The Balance column is the funds available in each sub-account at the beginning of FY 2017. The Funds Available column provides the total funds available in each sub-account during the fiscal year.

Table 6: FY 2017 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 Availble
VORF A (NDRF)	$5,970,417	$2,131,976	$932	$243,153	$8,346,477
VORF B (SMA's & USMMA)	$2,126,925	$1,065,988	$466	$0	$3,193,379
VORF C1 (NPS)	$4,959,152	$532,994	$233	$0	$5,492,379
VORF C2 (MARAD)	$2,286,817	$532,994	$233	$471,600	$3,291,644
Suspense Account	$4,263,952	($4,263,952)	$0	$0	$0
Total	$19,607,263	$0	$1,863	$714,753	$20,323,879

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 2017. The FY 17 ending balance represents the funds available at the beginning of FY 2018.

Table 7: FY 2017 VORF Program Obligations, End of Fiscal Year Balance

VORF Sub-Account Summary of Obligations			
Funds Available, Obligations, Final Fiscal Year Balance			
Sub-Accounts	Funds Availble	Obligations	FY 17 Ending Balance
VORF A (NDRF)	$8,346,477	$5,869,773	$2,476,704
VORF B (SMA's & USMMA)	$3,193,379	$789,241	$2,404,138
VORF C1 (NPS)	$5,492,379	$5,035,398	$456,981
VORF C2 (MARAD)	$3,291,644	$368,043	$2,923,601
Suspense Account	$0	$0	$0
Total	$20,323,879	$12,062,455	$8,261,424

VORF FY 2017 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 2017 totaled $5,869,773 for the following NDRF projects.

Project	Description	Funding
Lifeboat Installation	Installation of Safety-Lifeboats on six Fast Sealift Ships	$3,850,000
HVAC Installation	Procure Heating, Ventilation and Air Conditioning equipment for future installation on the Cape Washington	$1,125,000
Annual Maintenance	Perform annual maintenance and repairs on the M/V Freedom Star	$292,773
Habitability Repairs	Accomplish U.S. Marine Corp habitability repairs on the SS Wright	$365,000
Hull Repairs	Accomplish additional hull coating and repairs on the M/V Harkness during dry-docking	$137,000
Containment Booms	Procure and distribute containment booms to the Cape Ray, Cape Race and Cape Rise	$100,000
	Total Funds	$5,869,773

Table 8 provides a summary of the fiscal year distributions from the VORF A sub-account for FY's 2009-2017.

Table 8: VORF A Fund Distributions FY 2009 - 2017

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**	**Summary**
VORF - A	$1.5M	$1.7M	$1.0M	$2.2M	$5.3M	$7.5M	$10.5M	$798K	$5.9M	$36.4M

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 2017, a total of $789,241 was obligated to the Maritime Academies. Amounts to the individual schools are listed in the table below.

Academy	Funds
U.S. Merchant Marine	$69,241
Maine Maritime	$120,000
Massachusetts Maritime	$120,000
Great Lakes Maritime	$120,000
Texas A&M Maritime	$120,000
California Maritime	$120,000
SUNY Maritime	$120,000
Total Funds	$789,241

Table 9 provides a summary of the funds distributed to the USMMA and State Maritime Academies for FY's 2009–2017.

Table 9: VORF B Funds Distributed to the Maritime Academies FY 2009 - 2017

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**	**SUMMARY**
USMMA	$444,561	$188,143	$147,959	$962,000	$0	$0	$1,600,000	$0	$69,241	$3,411,904
Maine	$300,000	$0	$60,537	$940,056	$0	$1,000,000	$0	$0	$120,000	$2,420,593
Mass	$300,000	$0	$20,180	$940,056	$0	$1,000,000	$0	$0	$120,000	$2,380,236
Great Lakes	$50,000	$0	$20,180	$940,056	$0	$1,000,000	$0	$0	$120,000	$2,130,236
Texas	$0	$0	$20,180	$940,056	$0	$1,000,000	$0	$0	$120,000	$2,080,236
California	$450,000	$0	$131,165	$940,056	$0	$1,000,000	$0	$0	$120,000	$2,641,221
SUNY	$300,000	$0	$131,165	$940,056	$0	$1,000,000	$0	$0	$120,000	$2,491,221
Annual Total	**$1,844,561**	**$188,143**	**$531,366**	**$6,602,333**	**$0**	**$6,000,000**	**$1,600,000**	**$0**	**$789,241**	**$17,555,644**

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 National Park Service's (NPS) National Maritime Heritage Grant Program (NMHGP) (VORF C1) and to the Administrator of the Maritime Administration, for use in the preservation and presentation to the public of maritime heritage property of the Maritime Administration or to provide additional support to the NPS's NMHGP (VORF C2). [13]
The information provided is based on the allocation requirements in the NMHA prior to the FY 2017 NDAA amendment to the allocation of vessel sales proceeds for maritime heritage property preservation and presentation.

VORF C1: National Park Service NMHGP

MARAD provided $5,035,398 to the NPS in FY 2017 to support maritime heritage projects selected by the NPS in the NMHGP. The NPS 2017 Grant Program and Application Information can be found at https://www.nps.gov/maritime/grants/apply.htm.

[13] In 2013 MARAD and the NPS entered into a Memorandum of Agreement which established the 12.5% allocation of the VORF C funds. The amounts are adjustable based on consultation and each agency's requirement.

VORF C2: MARAD Maritime Heritage

In FY 2017, MARAD obligated $398K for newly approved projects for the preservation and presentation to the public of MARAD's maritime heritage property. Overall MARAD expended $1,738,917 in FY 2017 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 fiscal years.

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 2017.

Table 10: FY 2017 MARAD Maritime Heritage Projects

FY 2017 VORF C2 (HQ) MARAD Maritime Heritage Projects		
	Heritage Project Description	**Expended Funds**
1	Travel, administrative, and miscellaneous expenses for management of MARAD's Maritime History and Heritage Program.	$13,198
2	Vessel History Database: Phase III. Appending historical information pertaining to MARAD-owned shipwrecks. Upgrading database functionality through the development of additional queriable data fields.	$68,441
3	Vessel History Database: Data Normalization. Appending historical research and documentation pertaining to MARAD-owned shipwrecks for compliance with the National Historic Preservation Act Section 110 historic preservation responsibilites.	$109,772
4	Historical documentation of MARAD's participation in wars, major conflicts and humanitarian assistance actions and activites.	$78,870
5	Secure, protect and preserve MARAD heritage artifacts and assets stored at Cheatham Annex that were previously removed from WWII-era to present day vessels.	$22,669
6	Continue conservation and preservation of MARAD heritage assests Cheatham Annex.	$165,595
7	National Park Service: Historic American Engineering Record (HAER), Continue collecting and compiling vessel drawings, photographs, historical records, operational and engineering data for six Ready Reserve Force vessels. The ongoing documentation recordation project will produce, for each vessel, a historical report which describes each vessels complexity and historical significance.	$21,534
8	Conserve and repair damaged ship models including display cases and bases.	$9,292
9	Complete the 360-degree virtual tour/photo documentation of Ready Reserve Force vessels Admiral William M. Callaghan and SS Petersburg.	$10,600

FY 2017 VORF C2 (HQ) MARAD Maritime Heritage Projects		
	Heritage Project Description	**Expended Funds**
10	Conduct a condition assessment and pre-conservation survey of heritage assets at MARAD HQ and regional offices.	$32,411
11	Continue scanning of historically significant documents, drawings and plans.	$2,091
12	USACE -PA/Landscape Management Plan/Maintenance and Repair Manual	$52,834
13	NDRF Oral History Projesct: Continue recordation project for National Defense Reserve Fleet individual oral history Interviews.	$17,548
14	NS Savannah Heritage Projects: Include Electrical Power Survey Phase 2, Replacement of 120 Volt Transformers, Fire Hazard Analysis, Marine Engineering and Drafting services.	$595,000
15	NS Savannah Nuclear Historian Consultation: Continue development of NS Savannah National Historic Preservation Act for Section 110 historic preservation responsibilites.	$15,082
16	NS Savannah National Park Service HAER: Supplemental Recordation Project. The supplemental documentation recordation project will further describe the vessels complexity and historical significance.	$78,397
17	NS Savannah National Historic Preservation Act Heritage Projects:	$400,202
18	NS Savannah Operations History: Oral History Project, Continue oral history interviews recordation project.	$41,081
19	Clean, preserve and conserve seven paintings at the U.S. Merchant Marine Academy	$4,300
	Total Funds Expended in FY 2017	**$1,738,917**

Table 11 provides a summary of the FY distributions from the VORF C2 sub-account to the NPS and MARAD for FY's 2009-2017 for maritime heritage property preservation and presentation.

Table 11: VORF C Funds Provided for Maritime Heritage FY 2009 - 2017

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**	**Summary**
VORF - C1 NPS	$0	$0	$0	$0	$0	$2.0M	$2.8M	$968K	$5.0M	$10.8M
VORF - C2 HQ	$0	$0	$176K	$200K	$410K	$246K	$498K	$3.3M	$368K	$5.2M
Annual Total	**$0**	**$0**	**$176K**	**$200K**	**$410K**	**$2.2M**	**$3.3M**	**$4.3M**	**$5.4M**	**$16.0M**

Amounts reflect funds obligated for contract actions through FY 2017.

Fiscal Year 2018 Planned Disposal Activities

In October 2016, MARAD downgraded two vessels to non-retention status, the HARKNESS located in the JRRF and the CAPE FLORIDA, located in the BRF bringing to 18 the total number of non-retention vessels awaiting disposal. MARAD awarded four vessels for disposal leaving 14 vessels available for disposal at the end of FY 2017. On October 1, 2017, MARAD downgraded two vessels to non-retention status bringing the total number of vessels available for disposal at the beginning of FY 2018 to 16.

At the start of FY 2018, MARAD had 13 non-retention vessels in the three NDRF fleet sites and three vessels located at the NISMO facility in Philadelphia, PA, in the disposal queue. However, 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 2018 is the disposal of three non-retention vessels through competitive vessel sales or the procurement of recycling services. With the completion in FY 2017 of the removal of all 57 non-retention vessels covered under the Consent Decree, there are currently no non-retention vessels in the SBRF awaiting disposal. In FY 2018, MARAD will focus on the disposal of the worst conditioned vessels from the JRRF and BRF.

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 5 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 20 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 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 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**
Number of Vessels	3-5	4-6	4-6	4-6	4-6

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 3-5 vessels in FY 2018 with the disposal of 4-6 vessels in FY's 2019-2022.

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 has 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 vessel under the Consent Decree MARAD will focus on the removal of the worst conditioned vessels in the JRRF and BRF.

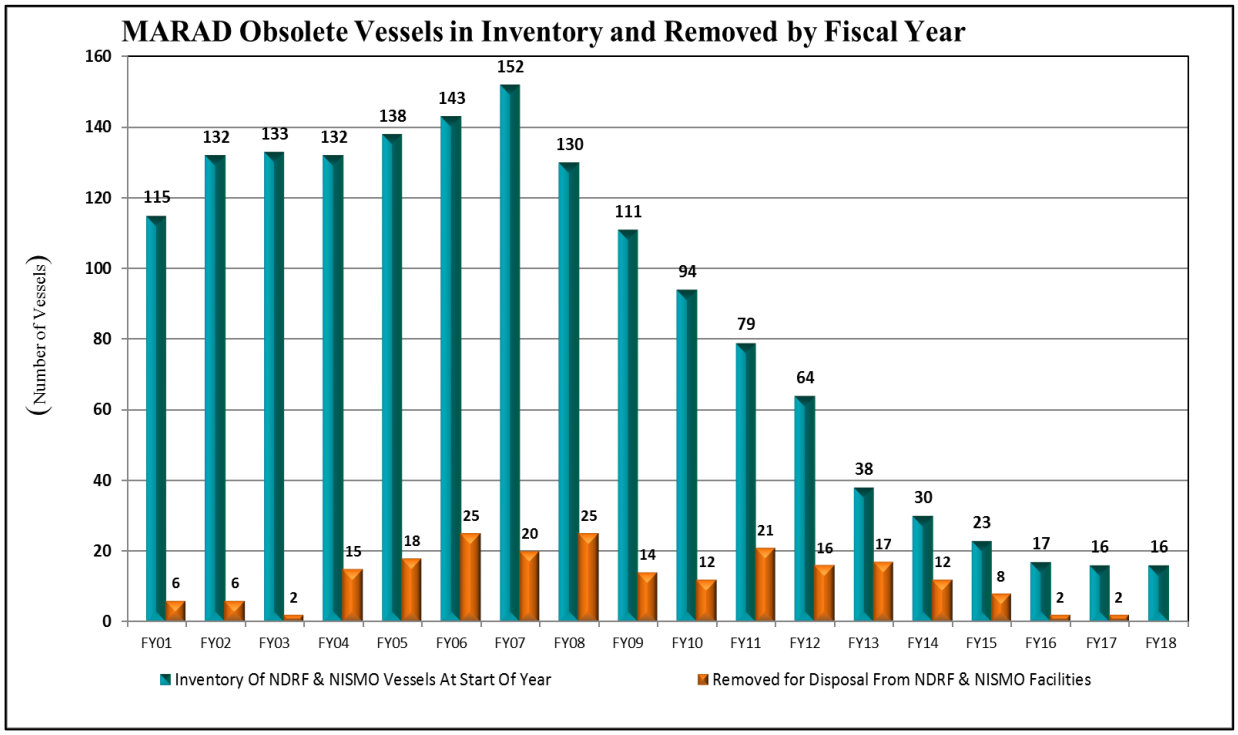
The Agency's ability to meet future performance targets is based on factors including, but not limited to, the following:

- 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 fiscal year from FY 2001 through September of 2017.

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 3.2 vessels per year over the 17-year period -- missing the annual target in only five years. It is interesting to note that from FYs 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 FYs 2001–2007.

Between FYs 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 met its annual vessel removal targets from FYs 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 $2.3M 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 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 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 no vessel sales and the removal of only two vessels in FY 2016, four short of the target.

In FY 2017, MARAD against faced continued lower prices for scrap steel, appropriations sufficient for only the removal of the last two SBRF vessels requiring dry-docking and long tows. One small vessel with diminished scrap metal tonnage available for recycling and one vessel with unknown quantities of mud ballast, requiring a labor intensive and costly remediation process, did not sell requiring the use of appropriates funds for disposal. As a result, MARAD again sold no vessels for recycling and fell two vessels short of the FY 2017 target.

In addition to the total vessels removed from the NDRF for disposal each fiscal year, another measure to gauge Program performance since FY 2010 is the number of SBRF vessels removed to recycling facilities, which is specific to the requirements of the Consent Decree.

Figure H: Vessel Removal Projections Compared to Actual Vessel Removals

Vessel Removal Projections Compared to Actual Vessel Removals

Non-retention vessels removed annually from MARAD NDRF and Navy NISMF sites.

FY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Actuals (Thru FY2017)
Target:	3	3	4	4	15	13	13	16	14	10	10	12	15	15	10	6	6	169	
Actual:	6	6	2	15	18	25	20	25	14	12	21	16	17	12	8	2	4	223	**(Δ +54)**

Cumulative number of non-retention SBRF vessels removed from the fleet per the Consent Decree.
Each year's target and actual totals are cumulative totals since 2010.

FY	2010	2011	2012	2013	2014	2015	2016	2017
Target:	10	20	28	32	38	44	50	57
Actual:	11	26	36	44	52	54	55	57

The differential (Δ) between the targets and actual results for vessel removals over the last 17 years shows that all annual targets have been met or exceeded except for five years. The targets that were not meet in FY's 2014-2017 correspond 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 have reduced 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 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 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 U.S. 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 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.

N.S. SAVANNAH

MARAD is responsible for this legacy asset because it is the agency that built and operated it under statutory authority enacted in 1956. 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 in 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 NSS. 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 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.[14] Under the provisions of the National Historic

[14] 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.

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.

Protective Storage

The vessel is currently berthed at Pier 13, Canton Marine Terminal, 4601 Newgate Ave., Baltimore, MD and is in a state of protective storage. MARAD's contemporary protective storage program meets the intent of NRC regulations and guidelines, and is comparable to the SAFSTOR programs at all other domestic, permanently-shutdown and defueled commercial nuclear power plants. As noted in the overview section, the NSS was initially mothballed in 1976. It was one of the first NRC, formerly the Atomic Energy Commission (AEC), licensed power plants to be permanently shut down and placed into protective storage. The NSS remained in this condition until it was removed from the JRRF in 2006 to begin decommissioning preparations. When the decommissioning project was later suspended, it became necessary to bring NSS into conformance with contemporary protective storage criteria, which had evolved substantially over 30 years of experience. The current NRC regulations and guides 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 may be 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. An intended program of technical upgrades to bring NSS into full conformance with current SAFSTOR standards was not completed. To compensate for this technical non-conformance, MARAD, with NRC oversight, employs a robust administrative and surveillance/monitoring program. The ship is berthed at an accessible location to permit this 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.

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 U.S. is a technologically and regulatory mature process. Twelve commercial nuclear power plants, and multiple government facilities have been decommissioned within the past 25 years.

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.

FY 2017 Significant Activities

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 Environmental Assessment. The contractor's augmented staffing was put in place near the end of the 4Q, such that performance of decommissioning activities began in FY 2018. Those activities will be described in the FY 2018 Annual Report.

MARAD distributed two tranches of stewardship (heritage) funds from the VORF account to the NSS during the FY 2016 period. Funding from the first tranche was employed to develop NHPA-required preliminary planning documents for decommissioning, and also for various maintenance projects related to public access. The second tranche of funding supported additional public-access related projects, described earlier, with performance during FY 2017.

III CONCLUSIONS

An aggressive program of maximizing the use of disposal funding and pursuing all feasible disposal options has resulted in the removal of 219 obsolete vessels since 2001. Those removals from the fleet sites have reversed a trend in the growth of the number of obsolete ships in MARAD's custody. As of October 1, 2017, there were only 13 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.

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.

Beginning in January 2014 scrap steel prices collapsed from a high of $400 per metric ton; reaching their lowest point of $135 per metric ton in October 2015. The collapse of scrap steel prices fueled by slowing worldwide demand for processed and finished steel products, depressed the domestic ship recycling industry whereby recycling facilities were not able 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 award of a service contract to subsidize costs. From the historical low in October 2015 scrap steel prices embarked on a slow rebound starting in May of 2016 and by September 2017 were hovering near $300 per metric ton. Increasing and sustained scrap steel prices combined with increased domestic and worldwide scrap metal demand increases the ship recycling industry's ability to finance and purchase MARAD/Navy vessels for recycling.

The decline in vessel sales reduces proceeds deposited into the VORF account and when combined with reduced ship disposal appropriations lessens the flexibility to award vessel recycling service contracts in the face of declining scrap steel prices. This imbalance between the award of vessel sales and service contracts leaves both MARAD and the Navy unable to respond to volatile scrap steel prices, sustain a steady flow of vessels in the disposal queue and preserve the ship disposal industrial base.

Significant market fluctuations in scrap steel prices and trends in any one or a combination of those variables are beyond MARAD/Navy's control and can significantly affect meeting performance targets. Positive trends in the majority of the variables boost vessel sales, increase sales revenue which increases funds available for the NMHGP. Negative trends in the variables reduce or eliminate vessel sales, decrease sales revenue and require appropriated funds to dispose of non-retention vessels.

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.

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 18	FY 19	FY 20	FY 21	FY 22	
1	Wheeler	MT	Dredge	Active	1982	35								TBD
2	Essayons	MT	Dredge	Active	1983	34								TBD
3	McFarland	MT	Dredge	Active	1966	51								TBD
4	Hurley	MT	Dredge	Active	1993	24								TBD
5	Yaquina	MT	Dredge	Active	1981	36								TBD
6	Jadwin	MT	Dredge	Active	1933	84								TBD
7	Potter	MT	Dredge	Active	1932	85								TBD
8	Mississippi	MT	Towboat	Active	1993	24								TBD

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	0
SINKEX	0
Foreign Military Sales	0
Scrap	0
Donation	0
TBD	0
Total Inactive	0
Total Active	8
Total Number of Ships*	8

Planned Removal from Service Summary						
Avail for	Fiscal Year Removed from Service					
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22	
0	0	0	0	0	0	

* 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 18	FY 19	FY 20	FY 21	FY 22	
1	USAV General Frank S. Besson, Jr (LSV-1)	MT	Logistics Support Vessel	Active	1988	29								2029
2	USAV CW3 Harold C. Clinger (LSV-2)	MT	Logistics Support Vessel	Active	1988	29								2029
3	USAV General Brehon B. Somervell (LSV-3)	MT	Logistics Support Vessel	Active	1988	29								2029
4	USAV Lt. General William B. Bunker (LSV-4)	MT	Logistics Support Vessel	Active	1988	29								2029
5	USAV Major General Charles P. Gross (LSV-5)	MT	Logistics Support Vessel	Active	1991	26								2029
6	USAV SP4 James A. Loux (LSV-6)	MT	Logistics Support Vessel	Active	1995	22								2029
7	USAV SSGT Robert T. Kuroda (LSV-7)	MT	Logistics Support Vessel	Active	2003	14								2027
8	USAV Major General Robert Smalls (LSV-8)	MT	Logistics Support Vessel	Active	2003	14								2027
9	Keystone State 6801	MT	Barge Derrick	Active	1998	19								2029
10	Saltillo 6802	MT	Barge Derrick	Active	1999	18								2029
11	Springfield 6803	MT	Barge Derrick	Active	2000	17								2030
12	Delaware 6804	MT	Barge Derrick	Active	2000	17								2030

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	0
SINKEX	0
Foreign Military Sales	0
Scrap	0
Donation	0
TBD	0
Total Inactive	0
Total Active	12
Total Number of Ships*	12

Planned Removal from Service Summary						
Avail for	Fiscal Year Removed from Service					
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22	
0	0	0	0	0	0	

* This represents the total number of vessels greater than 1,500 gross tons owned by the ARMY

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 18	FY 19	FY 20	FY 21	FY 22	
1	Tripoli	MT	Amphibious Assault Ship	Inactive	1966	51	Scrap	X						2015
2	FB-62	MT	Barge Office	Active	1944	73	Scrap				X			2020
3	Cape Farewell	MT	Barge Ship	Active	1973	44								2033
4	Cape Flattery	MT	Barge Ship	Active	1973	44								2033
5	Cape Fear	MT	Barge Ship	Active	1971	46								2031
6	Cape Florida	MT	Barge Ship	Inactive	1971	46	Scrap	X						2017
7	Cape May	MT	Barge Ship	Active	1972	45								2025
8	Cape Mendocino	MT	Barge Ship	Active	1972	45								2032
9	Cape Mohican	MT	Barge Ship	Active	1973	44								2023
10	Curtiss	MT	Break Bulk	Active	1969	48								2025
11	Wright	MT	Break Bulk	Active	1970	47								2026
12	Cape Gibson	MT	Break Bulk	Inactive	1968	49	Scrap	X						2015
13	Cape Girardeau	MT	Break Bulk	Active	1968	49	Scrap				X			2020
14	Cape Johnson	MT	Break Bulk	Awarded	1962	55	Contracted							2012
15	Cape Jacob	MT	Break Bulk	Active	1961	56	Scrap				X			2020
16	Cape Juby	MT	Break Bulk	Active	1962	55	Scrap					X		2021
17	Cape Nome	MT	Break Bulk	Active	1969	48	Scrap						X	2022
18	Cape Archway	MT	Break Bulk	Inactive	1963	54	Scrap	X						2009
19	Cape Avinof	MT	Break Bulk	Active	1963	54	Scrap		X					2018
20	Cape Ann	MT	Break Bulk	Active	1962	55	Scrap			X				2019
21	Cape Bover	MT	Break Bulk	Active	1966	51	Scrap				X			2020
22	Del Monte	MT	Break Bulk	Active	1968	49								2029
23	Cape Chalmers	MT	Break Bulk	Active	1963	54								2029
24	Cape Alexander	MT	Break Bulk	Inactive	1962	55	Scrap	X						2009
25	Cape Alava	MT	Break Bulk	Inactive	1962	55	Scrap	X						2013
26	Gopher State	MT	Crane Ship	Active	1973	44								2028
27	Flickertail State	MT	Crane Ship	Active	1969	48								2024
28	Cornhusker State	MT	Crane Ship	Active	1969	48								2024
29	Keystone State	MT	Crane Ship	Active	1967	50								2026
30	Grand Canyon State	MT	Crane Ship	Active	1966	51								2025
31	Gem State	MT	Crane Ship	Active	1966	51								2025
32	Diamond State	MT	Crane Ship	Active	1960	57	Scrap				X			2020
33	Equality State	MT	Crane Ship	Inactive	1962	55	Scrap	X						2016
34	Green Mountain State	MT	Crane Ship	Active	1965	52								2025
35	Algol	MT	Roll-On/Roll-Off	Active	1973	44								2033
36	Bellatrix	MT	Roll-On/Roll-Off	Active	1973	44								2033
37	Capella	MT	Roll-On/Roll-Off	Active	1973	44								2033
38	Antares	MT	Roll-On/Roll-Off	Active	1972	45								2032
39	Denebola	MT	Roll-On/Roll-Off	Active	1974	43								2034
40	Regulus	MT	Roll-On/Roll-Off	Active	1973	44								2033
41	Altair	MT	Roll-On/Roll-Off	Active	1973	44								2033
42	Pacific Tracker	MT	Missile Instrumentation	Active	1965	52								2027
43	Observation Island	MT	Missile Instrumentation	Inactive	1954	63	Scrap	X						2015

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 18	FY 19	FY 20	FY 21	FY 22	
44	Pacific Collector	MT	Missile Instrumentation	Active	1970	47								2027
45	NS Savannah	MT	Nuclear Ship	Active	1962	55								2031
46	Harkness	MT	Surveying Ship	Awarded	1968	49	Contracted							2017
47	Cape Hudson	MT	Roll-On/Roll-Off	Active	1979	38								2029
48	Cape Horn	MT	Roll-On/Roll-Off	Active	1979	38								2029
49	Cape Henry	MT	Roll-On/Roll-Off	Active	1979	38								2029
50	Cape Inscription	MT	Roll-On/Roll-Off	Active	1976	41								2026
51	Cape Isabel	MT	Roll-On/Roll-Off	Active	1977	40								2027
52	Cape Island	MT	Roll-On/Roll-Off	Active	1977	40								2027
53	Cape Intrepid	MT	Roll-On/Roll-Off	Active	1976	41								2026
54	Admiral Callaghan	MT	Roll-On/Roll-Off	Active	1968	49								2023
55	Pollux	MT	Roll-On/Roll-Off	Active	1973	44								2033
56	Cape Washington	MT	Roll-On/Roll-Off	Active	1982	35								2032
57	Cape Wrath	MT	Roll-On/Roll-Off	Active	1982	35								2032
58	Cape Victory	MT	Roll-On/Roll-Off	Active	1985	32								2035
59	Cape Vincent	MT	Roll-On/Roll-Off	Active	1984	33								2034
60	Cape Texas	MT	Roll-On/Roll-Off	Active	1977	40								2027
61	Cape Taylor	MT	Roll-On/Roll-Off	Active	1977	40								2027
62	Cape Kennedy	MT	Roll-On/Roll-Off	Active	1979	38								2029
63	Cape Knox	MT	Roll-On/Roll-Off	Active	1979	38								2029
64	Cape Orlando	MT	Roll-On/Roll-Off	Active	1981	36								2031
65	Cape Lobos	MT	Roll-On/Roll-Off	Inactive	1972	45	Scrap	X						2014
66	Cape Rise	MT	Roll-On/Roll-Off	Active	1977	40								2027
67	Cape Ray	MT	Roll-On/Roll-Off	Active	1977	40								2027
68	Cape Race	MT	Roll-On/Roll-Off	Active	1977	40								2027
69	Cape Diamond	MT	Roll-On/Roll-Off	Active	1972	45								2032
70	Cape Domingo	MT	Roll-On/Roll-Off	Active	1973	44								2033
71	Cape Decision	MT	Roll-On/Roll-Off	Active	1973	44								2033
72	Cape Douglas	MT	Roll-On/Roll-Off	Active	1973	44								2033
73	Cape Ducato	MT	Roll-On/Roll-Off	Active	1972	45								2032
74	Cape Edmont	MT	Roll-On/Roll-Off	Active	1971	46								2031
75	Cape Trinity	MT	Roll-On/Roll-Off	Active	1978	39								2028
76	Simon Lake	MT	Submarine Tender	Inactive	1964	53	Scrap	X						2006
77	Triumph	MT	Surveillance Ship	Active	1984	33					X			2020
78	Sumner	MT	Surveying Ship	Inactive	1992	25	Scrap	X						2014
79	Petersburg	MT	Tanker	Active	1963	54						X		2021
80	Chesapeake	MT	Tanker	Active	1964	53	Scrap		X					2018
81	Samuel L Cobb	MT	Tanker	Active	1985	32								2045
82	Paul Buck	MT	Tanker	Active	1985	32								2045
83	Richard G Matthiesen	MT	Tanker	Active	1983	34								2045
84	Kennedy	MT	Training Ship	Active	1967	50								2024
85	Empire State	MT	Training Ship	Active	1962	55	Scrap						X	2022
86	State Of Maine	MT	Training Ship	Active	1989	28								2034
87	Golden Bear	MT	Training Ship	Active	1971	46								2034
88	State Of Michigan	MT	Training Ship	Active	1985	32								2035
89	General Rudder	MT	Training Ship	Active	1984	33								2034

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	0
SINKEX	0
Foreign Military Sales	0
Scrap	22
Donation	0
TBD	0
Total Inactive	11
Total Active	76
Total Number of Ships*	87

Planned Removal from Service Summary					
Avail for	Fiscal Year Removed from Service				
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22
11	2	1	6	2	2

* This represents the total number of vessels greater than 1,500 gross tons owned by MARAD

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 18	FY 19	FY 20	FY 21	FY 22	
1	USS Enterprise (CVN -65)	C	Aircraft Carrier	Inactive	1960	57	Retain							2017
2	USS America (LHA-6)	MT	Amphibious Assault Ship	Active	2012	5								TBD
3	USS Makin Island (LHD-8)	MT	Amphibious Assault Ship	Active	2006	11								TBD
4	USS WASP (LHD 1)	MT	Amphibious Assault Ship	Active	1987	30								TBD
5	USS Essex (LHD-2)	MT	Amphibious Assault Ship	Active	1991	26								TBD
6	USS Kearsarge (LHD-3)	MT	Amphibious Assault Ship	Active	1992	25								TBD
7	USS Boxer (LHD-4)	MT	Amphibious Assault Ship	Active	1993	24								TBD
8	USS Bataan (LHD-5)	MT	Amphibious Assault Ship	Active	1996	21								TBD
9	USS Bonhomme Richard (LHD-6)	MT	Amphibious Assault Ship	Active	1997	20								TBD
10	USS Iwo Jima (LHD-7)	MT	Amphibious Assault Ship	Active	2000	17								TBD
11	USS Blue Ridge (LCC-19)	MT	Amphibious Command Ship	Active	1969	48								TBD
12	USS Mount Whitney (LCC-20)	MT	Amphibious Command Ship	Active	1970	47								TBD
13	USS Lewis B Puller (T-ESB 3)	MT	Expeditionary Sea Base	Active	2015	2								TBD
14	USS San Antonio (LPD-17)	MT	Amphibious Transport Dock	Active	2003	14								TBD
15	USS New Orleans (LPD-18)	MT	Amphibious Transport Dock	Active	2004	13								TBD
16	USS Mesa Verde (LPD-19)	MT	Amphibious Transport Dock	Active	2004	13								TBD
17	USS John P. Murtha (LPD-26)	MT	Amphibious Transport Dock	Active	2014	3								TBD
18	USS Somerset (LPD-25)	MT	Amphibious Transport Dock	Active	2012	5								TBD
19	USS Arlington (LPD-24)	MT	Amphibious Transport Dock	Active	2010	7								TBD
20	USS Anchorage (LPD-23)	MT	Amphibious Transport Dock	Active	2011	6								TBD
21	USS San Diego (LPD-22)	MT	Amphibious Transport Dock	Active	2010	7								TBD
22	USS New York (LPD-21)	MT	Amphibious Transport Dock	Active	2007	10								TBD
23	USS Green Bay (LPD-20)	MT	Amphibious Transport Dock	Active	2006	11								TBD
24	USS Rushmore (LSD-47)	MT	Dock Landing Ship	Active	1989	28								TBD
25	USS Ashland (LSD-48)	MT	Dock Landing Ship	Active	1989	28								TBD
26	USS Tortuga (LSD-46)	MT	Dock Landing Ship	Active	1988	29								TBD
27	USS Comstock (LSD-45)	MT	Dock Landing Ship	Active	1988	29								TBD
28	USS Gunston Hall (LSD-44)	MT	Dock Landing Ship	Active	1987	30								TBD
29	USS Fort McHenry (LSD-43)	MT	Dock Landing Ship	Active	1986	31								TBD
30	USS Germantown (LSD-42)	MT	Dock Landing Ship	Active	1984	33								TBD
31	USS Whidbey Island (LSD-41)	MT	Dock Landing Ship	Active	1983	34								TBD
32	USS Chancellorsville (CG 62)	C	Guided Missile Cruiser	Active	1988	29								TBD
33	USS Bunker Hill (CG 52)	C	Guided Missile Cruiser	Active	1985	32	Retain				X			2020
34	USS Mobile Bay (CG 53)	C	Guided Missile Cruiser	Active	1985	32	Retain				X			2020
35	USS Antietam (CG 54)	C	Guided Missile Cruiser	Active	1986	31							X	2022
36	USS Leyte Gulf (CG 55)	C	Guided Missile Cruiser	Active	1986	31							X	2022
37	USS San Jacinto (CG 56)	C	Guided Missile Cruiser	Active	1986	31								TBD
38	USS Lake Champlain (CG 57)	C	Guided Missile Cruiser	Active	1987	30								TBD
39	USS Philippine Sea (CG 58)	C	Guided Missile Cruiser	Active	1987	30								TBD
40	USS Princeton (CG 59)	C	Guided Missile Cruiser	Active	1987	30								TBD
41	USS Monterey (CG 61)	C	Guided Missile Cruiser	Active	1988	29								TBD
42	USS Cowpens (CG 63)	C	Guided Missile Cruiser	Active	1989	28								TBD
43	USS Gettysburg (CG 64)	C	Guided Missile Cruiser	Active	1989	28								TBD
44	USS Chosin (CG 65)	C	Guided Missile Cruiser	Active	1989	28								TBD
45	USS Hue City (CG 66)	C	Guided Missile Cruiser	Active	1990	27								TBD
46	USS Shiloh (CG 67)	C	Guided Missile Cruiser	Active	1990	27								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 18	FY 19	FY 20	FY 21	FY 22	
47	USS Anzio (CG 68)	C	Guided Missile Cruiser	Active	1990	27								TBD
48	USS Vicksburg (CG 69)	C	Guided Missile Cruiser	Active	1991	26								TBD
49	USS Lake Erie (CG 70)	C	Guided Missile Cruiser	Active	1991	26								TBD
50	USS Cape St. George (CG 71)	C	Guided Missile Cruiser	Active	1992	25								TBD
51	USS Vella Gulf (CG 72)	C	Guided Missile Cruiser	Active	1992	25								TBD
52	USS Port Royal (CG 73)	C	Guided Missile Cruiser	Active	1992	25								TBD
53	USS Normandy (CG 60)	C	Guided Missile Cruiser	Active	1988	29								TBD
54	USS Howard (DDG-83)	C	Guided Missile Destroyer	Active	1999	18								TBD
55	USS Winston S. Churchill (DDG-81)	C	Guided Missile Destroyer	Active	1999	18								TBD
56	USS Bulkeley (DDG-84)	C	Guided Missile Destroyer	Active	2000	17								TBD
57	USS Lassen (DDG-82)	C	Guided Missile Destroyer	Active	1999	18								TBD
58	USS Farragut (DDG-99)	C	Guided Missile Destroyer	Active	2005	12								TBD
59	USS McCampbell (DDG-85)	C	Guided Missile Destroyer	Active	2000	17								TBD
60	USS Shoup (DDG-86)	C	Guided Missile Destroyer	Active	2000	17								TBD
61	USS Mason (DDG-87)	C	Guided Missile Destroyer	Active	2001	16								TBD
62	USS Preble (DDG-88)	C	Guided Missile Destroyer	Active	2001	16								TBD
63	USS Mustin (DDG-89)	C	Guided Missile Destroyer	Active	2001	16								TBD
64	USS Chafee (DDG-90)	C	Guided Missile Destroyer	Active	2002	15								TBD
65	USS Pinckney (DDG-91)	C	Guided Missile Destroyer	Active	2002	15								TBD
66	USS Momsen (DDG-92)	C	Guided Missile Destroyer	Active	2003	14								TBD
67	USS Chung-Hoon (DDG-93)	C	Guided Missile Destroyer	Active	2002	15								TBD
68	USS Nitze (DDG-94)	C	Guided Missile Destroyer	Active	2004	13								TBD
69	USS James E. Williams (DDG-95)	C	Guided Missile Destroyer	Active	2003	14								TBD
70	USS Bainbridge (DDG-96)	C	Guided Missile Destroyer	Active	2004	13								TBD
71	USS Forrest Sherman (DDG-98)	C	Guided Missile Destroyer	Active	2004	13								TBD
72	USS Kidd (DDG-100)	C	Guided Missile Destroyer	Active	2004	13								TBD
73	USS Gridley (DDG-101)	C	Guided Missile Destroyer	Active	2005	12								TBD
74	USS Sampson (DDG-102)	C	Guided Missile Destroyer	Active	2006	11								TBD
75	USS Truxtun (DDG-103)	C	Guided Missile Destroyer	Active	2007	10								TBD
76	USS Sterett (DDG-104)	C	Guided Missile Destroyer	Active	2007	10								TBD
77	USS Dewey (DDG-105)	C	Guided Missile Destroyer	Active	2008	9								TBD
78	USS Stockdale (DDG-106)	C	Guided Missile Destroyer	Active	2008	9								TBD
79	USS Gravely (DDG-107)	C	Guided Missile Destroyer	Active	2009	8								TBD
80	USS Wayne E. Meyer (DDG-108)	C	Guided Missile Destroyer	Active	2008	9								TBD
81	USS Jason Dunham (DDG-109)	C	Guided Missile Destroyer	Active	2009	8								TBD
82	USS William P. Lawrence (DDG-110)	C	Guided Missile Destroyer	Active	2009	8								TBD
83	USS Spruance (DDG-111)	C	Guided Missile Destroyer	Active	2010	7								TBD
84	USS Michael Murphy (DDG-112)	C	Guided Missile Destroyer	Active	2011	6								TBD
85	USS Halsey (DDG-97)	C	Guided Missile Destroyer	Active	2004	13								TBD
86	USS Oscar Austin (DDG-79)	C	Guided Missile Destroyer	Active	1998	19								TBD
87	USS Roosevelt (DDG-80)	C	Guided Missile Destroyer	Active	1999	18								TBD
88	USS Milius (DDG-69)	C	Guided Missile Destroyer	Active	1995	22								TBD
89	USS John S. McCain (DDG-56)	C	Guided Missile Destroyer	Active	1992	25								TBD
90	USS Mitscher (DDG-57)	C	Guided Missile Destroyer	Active	1993	24								TBD
91	USS Laboon (DDG-58)	C	Guided Missile Destroyer	Active	1993	24								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 18	FY 19	FY 20	FY 21	FY 22	
92	USS Russell (DDG-59)	C	Guided Missile Destroyer	Active	1993	25								TBD
93	USS Paul Hamilton (DDG-60)	C	Guided Missile Destroyer	Active	1993	25								TBD
94	USS Fitzgerald (DDG-62)	C	Guided Missile Destroyer	Active	1994	24								TBD
95	USS Stethem (DDG-63)	C	Guided Missile Destroyer	Active	1994	24								TBD
96	USS Carney (DDG-64)	C	Guided Missile Destroyer	Active	1994	24								TBD
97	USS Benfold (DDG-65)	C	Guided Missile Destroyer	Active	1994	24								TBD
98	USS Gonzalez (DDG-66)	C	Guided Missile Destroyer	Active	1995	23								TBD
99	USS Curtis Wilbur (DDG-54)	C	Guided Missile Destroyer	Active	1992	26								TBD
100	USS The Sullivans (DDG-68)	C	Guided Missile Destroyer	Active	1995	23								TBD
101	USS John Paul Jones (DDG-53)	C	Guided Missile Destroyer	Active	1991	27								TBD
102	USS Hopper (DDG-70)	C	Guided Missile Destroyer	Active	1996	22								TBD
103	USS Ross (DDG-71)	C	Guided Missile Destroyer	Active	1996	22								TBD
104	USS Mahan (DDG-72)	C	Guided Missile Destroyer	Active	1996	22								TBD
105	USS Decatur (DDG-73)	C	Guided Missile Destroyer	Active	1996	22								TBD
106	USS McFaul (DDG-74)	C	Guided Missile Destroyer	Active	1997	21								TBD
107	USS Donald Cook (DDG-75)	C	Guided Missile Destroyer	Active	1997	21								TBD
108	USS Higgins (DDG-76)	C	Guided Missile Destroyer	Active	1997	21								TBD
109	USS O'Kane (DDG-77)	C	Guided Missile Destroyer	Active	1998	20								TBD
110	USS Porter (DDG-78)	C	Guided Missile Destroyer	Active	1997	21								TBD
111	USS Cole (DDG-67)	C	Guided Missile Destroyer	Active	1995	23								TBD
112	USS Stout (DDG-55)	C	Guided Missile Destroyer	Active	1992	26								TBD
113	USS Arleigh Burke (DDG-51)	C	Guided Missile Destroyer	Active	1989	29								TBD
114	USS Ramage (DDG-61)	C	Guided Missile Destroyer	Active	1994	24								TBD
115	USS Barry (DDG-52)	C	Guided Missile Destroyer	Active	1991	27								TBD
116	USS Zumwalt (DDG 1000)	C	Guided Missile Destroyer	Active	2013	5								TBD
117	USS Carter Hall (LSD-50)	MT	Landing Ship Dock	Active	1993	25								TBD
118	USS Harpers Ferry (LSD-49)	MT	Landing Ship Dock	Active	1993	25								TBD
119	USS Pearl Harbor (LSD-52)	MT	Landing Ship Dock	Active	1996	22								TBD
120	USS Oak Hill (LSD-51)	MT	Landing Ship Dock	Active	1994	24								TBD
121	USS Milwaukee (LCS-5)	C	Littoral Combat Ship	Active	2013	5								TBD
122	USS Fort Worth (LCS-3)	C	Littoral Combat Ship	Active	2010	8								TBD
123	USS Freedom (LCS-1)	C	Littoral Combat Ship	Active	2006	12								TBD
124	USS Jackson (LCS-6)	C	Littoral Combat Ship	Active	2013	5								TBD
125	USS Coronado (LCS-4)	C	Littoral Combat Ship	Active	2012	6								TBD
126	USS Detroit (LCS 7)	C	Littoral Combat Ship	Active	2014	4								TBD
127	USS Montgomery (LCS 8)	C	Littoral Combat Ship	Active	2014	4								TBD
128	USS Independence (LCS-2)	C	Littoral Combat Ship	Active	2008	10								TBD

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	3
SINKEX	0
Foreign Military Sales	0
Scrap	0
Donation	0
TBD	0
Total Inactive	1
Total Active	127
Total Number of Ships*	128

Planned Removal from Service Summary

Avail for Disposal	Fiscal Year Removed from Service				
	FY 18	FY 19	FY 20	FY 21	FY 22
0	0	0	2	0	2

* 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 18	FY 19	FY 20	FY 21	FY 22	
1	USS Ponce (AFSB-15)	MT	Afloat Forward Staging Base	Inactive	1970	47	Scrap		X					2018
2	USNS Lewis and Clark (T-AKE 1)	MT	Ammo/Dry Cargo	Active	2005	12								TBD
3	USNS Sacagawea (T-AKE 2)	MT	Ammo/Dry Cargo	Active	2006	11								TBD
4	USNS Alan Shepard (T-AKE 3)	MT	Ammo/Dry Cargo	Active	2006	11								TBD
5	USNS Richard E. Byrd (T-AKE 4)	MT	Ammo/Dry Cargo	Active	2007	10								TBD
6	USNS Robert E. Peary (T-AKE 5)	MT	Ammo/Dry Cargo	Active	2007	10								TBD
7	USNS Amelia Earhart (T-AKE 6)	MT	Ammo/Dry Cargo	Active	2008	9								TBD
8	USNS Carl Brashear (T-AKE 7)	MT	Ammo/Dry Cargo	Active	2008	9								TBD
9	USNS Wally Schirra (T-AKE 8)	MT	Ammo/Dry Cargo	Active	2009	8								TBD
10	USNS Matthew Perry (T-AKE 9)	MT	Ammo/Dry Cargo	Active	2010	7								TBD
11	USNS Charles Drew (T-AKE 10)	MT	Ammo/Dry Cargo	Active	2010	7								TBD
12	USNS Washington Chambers (T-AKE 11)	MT	Ammo/Dry Cargo	Active	2011	6								TBD
13	USNS William McLean (T-AKE 12)	MT	Ammo/Dry Cargo	Active	2011	6								TBD
14	USNS Medgar Evers (T-AKE 13)	MT	Ammo/Dry Cargo	Active	2011	6								TBD
15	USNS Cesar Chavez (T-AKE 14)	MT	Ammo/Dry Cargo	Active	2012	5								TBD
16	USNS Zeus (T-ARC 7)	MT	Cable Laying/Repair	Active	1982	35								2033
17	USS Mount Whitney (LCC 20)	MT	Command Ship	Active	1970	47								2039
18	USNS SGT Matej Kocak (T-AK 3005)	MT	Container Roll-On/Roll-	Active	1983	34								TBD
19	USNS PFC Eugene A. Obregon (T-AK 3006)	MT	Container Roll-On/Roll-	Active	1983	34								TBD
20	USNS MAJ Stephen W. Pless (T-AK 3007)	MT	Container Roll-On/Roll-	Active	1983	34								TBD
21	USNS 1st LT Harry L. Martin (T-AK 3015)	MT	Container Roll-On/Roll-	Active	1983	34								TBD
22	USNS LCPL Roy M. Wheat (T-AK 3016)	MT	Container Roll-On/Roll-	Active	1987	30								TBD
23	USNS Supply (T-AOE 6)	MT	Fast Combat Support Ship	Active	1990	27								TBD
24	USNS Arctic (T-AOE 8)	MT	Fast Combat Support Ship	Active	1993	24								TBD
25	USNS Mercy (T-AH 19)	MT	Hospital Ship	Active	1987	30								TBD
26	USNS Comfort (T-AH 20)	MT	Hospital Ship	Active	1976	41								TBD
27	USNS Guam (HST 1)	MT	High Speed Transport	Active	2008	9								TBD
28	USNS Puerto Rico (HST 2)	MT	High Speed Transport	Active	2004	13								TBD
29	USNS Spearhead (JHSV 1)	MT	Expeditionary Fast Transport	Active	2012	5								TBD
30	USNS Fall River (JHSV 4)	MT	Expeditionary Fast Transport	Active	2014	3								TBD
31	USNS Millinocket (JHSV 3)	MT	Expeditionary Fast Transport	Active	2014	3								TBD
32	USNS Choctaw County (JHSV 2)	MT	Expeditionary Fast Transport	Active	2013	4								TBD
33	USNS Watson (T-AKR 310)	MT	Medium Roll-On/Roll-Off	Active	1997	20								TBD
34	USNS Gordon (T-AKR 296)	MT	Medium Roll-On/Roll-Off	Active	1972	45								TBD
35	USNS Shughart (T-AKR 295)	MT	Medium Roll-On/Roll-Off	Active	1980	37								TBD
36	USNS Soderman (T-AKR 317)	MT	Medium Roll-On/Roll-Off	Active	2002	15								TBD
37	USNS Pomeroy (T-AKR 316)	MT	Medium Roll-On/Roll-Off	Active	2000	17								TBD
38	USNS Watkins (T-AKR 315)	MT	Medium Roll-On/Roll-Off	Active	2000	17								TBD
39	USNS Gilliland (T-AKR 298)	MT	Medium Roll-On/Roll-Off	Active	1972	45								TBD
40	USNS Red Cloud (T-AKR 313)	MT	Medium Roll-On/Roll-Off	Active	1999	18								TBD
41	USNS Bob Hope (T-AKR 300)	MT	Medium Roll-On/Roll-Off	Active	1997	20								TBD
42	USNS Charlton (T-AKR 314)	MT	Medium Roll-On/Roll-Off	Active	1999	18								TBD
43	USNS Yano (T-AKR 297)	MT	Medium Roll-On/Roll-Off	Active	1980	37								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 18	FY 19	FY 20	FY 21	FY 22	
44	USNS Benavidez (T-AKR 306)	MT	Medium Roll-On/Roll-Off	Active	1999	18								TBD
45	USNS Brittin (T-AKR 305)	MT	Medium Roll-On/Roll-Off	Active	2000	17								TBD
46	USNS Mendonca (T-AKR 303)	MT	Medium Roll-On/Roll-Off	Active	1999	18								TBD
47	USNS Fisher (T-AKR 301)	MT	Medium Roll-On/Roll-Off	Active	1997	20								TBD
48	USNS Howard O. Lorenzen (T-AGM 25)	MT	Missile Range	Active	2010	7								TBD
49	USNS Invincible (T-AGM 24)	MT	Missile Range	Active	1987	30								TBD
50	USNS John Glenn (MLP 2)	MT	Mobile Landing Platforms	Active	2012	5								TBD
51	USNS Montford Point (MLP 1)	MT	Mobile Landing Platforms	Active	2012	5								TBD
52	USNS Waters (T-AGS 45)	MT	Navigation Test Support	Active	1992	25								TBD
53	USNS Impeccable (T-AGOS 23)	MT	Ocean Surveillance	Active	1998	19								TBD
54	USNS Able (T-AGOS 20)	MT	Ocean Surveillance	Active	1991	26								TBD
55	USNS Loyal (T-AGOS 22)	MT	Ocean Surveillance	Active	1992	25								TBD
56	USNS Victorious (T-AGOS 19)	MT	Ocean Surveillance	Active	1991	26								TBD
57	USNS Effective (T-AGOS 21)	MT	Ocean Surveillance	Active	1991	26								TBD
58	USNS Sioux (T-ATF 171)	MT	Fleet Ocean Tug	Active	1980	37	Scrap					X		2021
59	USNS Apache (T-ATF 172)	MT	Fleet Ocean Tug	Active	1981	36	Scrap					X		2021
60	USNS Catawba (T-ATF 168)	MT	Fleet Ocean Tug	Active	1979	38	Retain			X				2019
61	USNS Mary Sears (T-AGS 65)	MT	Oceangraphic Survey	Active	2000	17								TBD
62	USNS Bruce C. Heezen (T-AGS 64)	MT	Oceangraphic Survey	Active	1999	18								TBD
63	USNS Henson (T-AGS 63)	MT	Oceangraphic Survey	Active	1996	21								TBD
64	USNS Bowditch (T-AGS 62)	MT	Oceangraphic Survey	Active	1994	23								TBD
65	USNS Pathfinder (T-AGS 60)	MT	Oceangraphic Survey	Active	1993	24								TBD
66	USNS John Lenthall (T-AO 189)	MT	Fleet Oiler	Active	1986	31	Scrap					X		2021
67	USNS Walter S. Diehl (T-AO 193)	MT	Fleet Oiler	Active	1987	30	Retain				X			2020
68	USNS John Ericsson (T-AO 194)	MT	Fleet Oiler	Active	1990	27								TBD
69	USNS Joshua Humphreys (T-AO 188)	MT	Fleet Oiler	Active	1986	31								TBD
70	USNS Henry J. Kaiser (T-AO 187)	MT	Fleet Oiler	Active	1985	32								TBD
71	USNS Pecos (T-AO 197)	MT	Fleet Oiler	Active	1989	28								TBD
72	USNS Laramie (T-AO 203)	MT	Fleet Oiler	Active	1995	22								TBD
73	USNS Leroy Grumman (T-AO 195)	MT	Fleet Oiler	Active	1988	29								2022
74	USNS Rappahannock (T-AO 204)	MT	Fleet Oiler	Active	1995	22								TBD
75	USNS Kanawha (T-AO 196)	MT	Fleet Oiler	Active	1990	27								TBD
76	USNS Yukon (T-AO 202)	MT	Fleet Oiler	Active	1993	24								TBD
77	USNS Patuxent (T-AO 201)	MT	Fleet Oiler	Active	1994	23								TBD
78	USNS Guadalupe (T-AO 200)	MT	Fleet Oiler	Active	1991	26								TBD
79	USNS Tippecanoe (T-AO 199)	MT	Fleet Oiler	Active	1992	25								TBD
80	USNS Big Horn (T-AO 198)	MT	Fleet Oiler	Active	1991	26								TBD
81	USNS Vadm K. R. Wheeler (T-AG 5001)	MT	Offshore Petroleum	Active	2007	10								TBD
82	USNS Salvor (T-ARS 52)	MT	Rescue/Salvage	Active	1984	33								TBD
83	USNS Grasp (T-ARS 51)	MT	Rescue/Salvage	Active	1985	32								TBD
84	USNS Seay (T-AKR 302)	MT	Large, Medium-Speed Ro/Ro	Active	1998	19								TBD
85	USNS SGT William R. Button (T-AK 3012)	MT	Large, Medium-Speed Ro/Ro	Active	1986	31								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 18	FY 19	FY 20	FY 21	FY 22	
86	USNS 1st LT Jack Lummus (T-AK 3011)	MT	Large, Medium-Speed Ro/Ro	Active	1986	31								TBD
87	USNS 1st LT Baldomero Lopez (T-AK 3010)	MT	Large, Medium-Speed Ro/Ro	Active	1985	32								TBD
88	USNS PFC Dewayne T. Williams (T-AK 3009)	MT	Large, Medium-Speed Ro/Ro	Active	1985	32								TBD
89	USNS 2ND LT John P. Bobo (T-AK 3008)	MT	Large, Medium-Speed Ro/Ro	Active	1985	32								TBD
90	USNS GYSGT Fred W. Stockham (T-AK 3017)	MT	Large, Medium-Speed Ro/Ro	Active	1980	37								TBD
91	USNS Dahl (T-AKR 312	MT	Large, Medium-Speed Ro/Ro	Active	1998	19								TBD
92	USNS Pililaau (T-AKR 304)	MT	Large, Medium-Speed Ro/Ro	Active	2000	17								TBD
93	USNS Sisler (T-AKR 311)	MT	Large, Medium-Speed Ro/Ro	Active	1998	19								TBD
94	Sea-Based X-Band Radar	MT	Semi-Submersible	Active	2006	11								TBD
95	USS Frank Cable (AS 40)	MT	Sub Tenders	Active	1978	39								TBD
96	USS Emory S. Land (AS 39)	MT	Sub Tenders	Active	1977	40								TBD
97	USNS Lewis B Puller (MLP/AFSB 3)	MT	Expeditionary Sea Base	Active	2015	2								TBD
98	USNS Maury (T-AGS-66)	MT	Surveying Ship	Active	2016	1								TBD
99	USNS Trenton (T-EPF 5)	MT	Expeditionary Fast	Active	2015	2								TBD
100	USNS Carson City (T-EPF 7)	MT	Expeditionary Fast	Active	2016	1								TBD
101	USNS Brunswick (T-EPF 6)	MT	Expeditionary Fast	Active	2016	1								TBD
102	USNS Lawrence H. Gianella (T-AOT 1125)	MT	Tanker	Active	1985	32	Retain		X					2018

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	3
SINKEX	0
Foreign Military Sales	0
Scrap	4
Donation	0
TBD	0
Total Inactive	1
Total Active	101
Total Number of Ships*	102

Planned Removal from Service Summary					
Avail for	Fiscal Year Removed from Service				
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22
0	2	1	1	3	0

* This represents the total number of vessels greater than 1,500 gross tons operated by MSC.

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 18	FY 19	FY 20	FY 21	FY 22	
1	Ex-Kitty Hawk (CV-63)	C	Aircraft Carrier	Inactive	1960	57	Scrap	X						TBD
2	Ex-John F. Kennedy (CV-67)	C	Aircraft Carrier	Inactive	1967	50	Scrap	X						2007
3	Ex-Peleliu (LHA-5)	MT	Amphibious Assault Ship	Inactive	1978	39	Retain							2015
4	Ex-Tarawa (LHA-1)	MT	Amphibious Assault Ship	Inactive	1973	44	Retain							2009
5	Ex-Nassau (LHA-4)	MT	Amphibious Assault Ship	Inactive	1978	39	Retain							2011
6	Ex-Charleston (LKA-113)	MT	Amphibious Cargo Ship	Inactive	1967	50	Scrap	X						2015
7	Ex-Durham (LKA-114)	MT	Amphibious Cargo Ship	Inactive	1968	49	SINKEX	X						1994
8	Ex-St. Louis (LKA-116)	MT	Amphibious Cargo Ship	Inactive	1969	48	SINKEX	X						1992
9	Ex-El Paso (LKA-117)	MT	Amphibious Cargo Ship	Inactive	1969	48	Scrap	X						1994
10	Ex-Mobile (LKA-115)	MT	Amphibious Cargo Ship	Inactive	1968	49	Scrap	X						1994
11	Ex-Shreveport (LPD-12)	MT	Amphibious Transport Dock	Inactive	1966	51	Scrap	X						2007
12	Ex-Dubuque (LPD-8)	MT	Amphibious Transport Dock	Inactive	1966	51	Retain							2011
13	Ex-Denver (LPD-9)	MT	Amphibious Transport Dock	Inactive	1965	52	Retain							2014
14	Ex-Nashville (LPD-13)	MT	Amphibious Transport Dock	Inactive	1967	50	Retain							2009
15	Ex-Juneau (LPD-10)	MT	Amphibious Transport Dock	Inactive	1966	51	Retain							2008
16	Ex-Cleveland (LPD-7)	MT	Amphibious Transport Dock	Inactive	1966	51	Retain							2011
17	Ex-Charles F. Adams (DDG-2)	C	Destroyer	Inactive	1959	58	Donation	X						1990
18	Ex-Barry (DD-933)	C	Destroyer	Inactive	1955	62	Scrap	X						1982
19	Ex-Ticonderoga (CG-47)	C	Guided Missile Destroyer	Inactive	1981	36	Scrap	X						2004
20	Ex-Yorktown (CG-48)	C	Guided Missile Destroyer	Inactive	1983	34	Scrap	X						2004
21	Ex-Vandegrift (FFG-48)	C	Guided Missile Frigate	Inactive	1982	35	FMS	X						2015
22	Ex-Elrod (FFG-55)	C	Guided Missile Frigate	Inactive	1984	33	FMS	X						2015
23	Ex-Simpson (FFG-56)	C	Guided Missile Frigate	Inactive	1984	33	FMS	X						2015
24	Ex-Kauffman (FFG-59)	C	Guided Missile Frigate	Inactive	1986	31	FMS	X						2015
25	Ex-Rodney M. Davis (FFG-60)	C	Guided Missile Frigate	Inactive	1986	31	FMS	X						2015
26	Ex-McClusky (FFG-41)	C	Guided Missile Frigate	Inactive	1982	35	SINKEX	X						2015
27	Ex-Ingraham (FFG-61)	C	Guided Missile Frigate	Inactive	1988	29	SINKEX	X						2015
28	Ex-De Wert (FFG-45)	C	Guided Missile Frigate	Inactive	1982	35	FMS	X						2014
29	Ex-Robert G. Bradley (FFG-49)	C	Guided Missile Frigate	Inactive	1983	34	FMS	X						2014
30	Ex-Halyburton (FFG-40)	C	Guided Missile Frigate	Inactive	1981	36	FMS	X						2014

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 18	FY 19	FY 20	FY 21	FY 22	
31	Ex-Ford (FFG-54)	C	Guided Missile Frigate	Inactive	1984	33	SINKEX	X						2013
32	Ex-Klakring (FFG-42)	C	Guided Missile Frigate	Inactive	1982	35	FMS	X						2013
33	Ex-Carr (FFG-52)	C	Guided Missile Frigate	Inactive	1983	34	FMS	X						2013
34	Ex-Curts (FFG-38)	C	Guided Missile Frigate	Inactive	1982	35	SINKEX	X						2013
35	Ex-Samuel B Roberts (FFG-58)	C	Guided Missile Frigate	Inactive	1984	33	Scrap	X						2015
36	Ex-Nicholas (FFG-47)	C	Guided Missile Frigate	Inactive	1983	34	Scrap	X						2014
37	Ex-Underwood (FFG-36)	C	Guided Missile Frigate	Inactive	1982	35	Scrap	X						2013
38	Ex-John L Hall (FFG-32)	C	Guided Missile Frigate	Inactive	1981	36	Scrap	X						2012
39	Ex-Boone (FFG-28)	C	Guided Missile Frigate	Inactive	1980	37	Scrap	X						2012
40	Ex-Doyle (FFG-39)	C	Guided Missile Frigate	Inactive	1982	35	Contracted							2011
41	Ex-Stephen W Groves (FFG-29)	C	Guided Missile Frigate	Inactive	1981	36	Scrap	X						2012
42	Ex-Hawes (FFG-53)	C	Guided Missile Frigate	Inactive	1984	33	Scrap	X						2010
43	Ex-Rainier (T-AOE 7)	MT	Fast Combat Support Ship	Inactive	1991	26	Retain							2016
44	Ex-Bridge (T-AOE 10)	MT	Fast Combat Support Ship	Inactive	1996	21	Retain							2016
45	Ex-Navajo (T-ATF 169)	MT	Fleet Ocean Tug	Inactive	1979	38	LSA							2017
46	Ex-Mohawk (T-ATF-170)	MT	Fleet Ocean Tug	Inactive	1980	37	Scrap	X						2015
47	Ex-Hayes (T-AGOR-16)	MT	Oceanographic Research	Inactive	1970	47	Scrap	X						2008
48	Ex-Safeguard (T-ARS 50)	MT	Rescue/Salvage	Inactive	1983	34	Retain							2017
49	Ex-Grapple (T-ARS 53)	MT	Rescue/Salvage	Inactive	1984	33	Retain							2017
50	Ex-Boulder (LST-1190)	MT	Tank Landing Ship	Inactive	1970	47	Scrap	X						1994
51	Ex-Racine (LST-1191)	MT	Tank Landing Ship	Inactive	1970	47	SINKEX	X						1993

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Logistics Support Asset
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	12
SINKEX	7
Foreign Military Sales	10
Scrap	19
Logistics Support Asset	1
Donation	1
TBD	0
Total Inactive	50
Total Number of Ships*	51

Planned Removal from Service Summary

Avail for Disposal	Fiscal Year Removed from Service				
	FY 18	FY 19	FY 20	FY 21	FY 22
37	0	0	0	0	0

Does not included is the awarded vessel Ex-Doyle or the Patrol Gunboat Canon

* 51 represents the total number of Inactive vessels greater than 1,500 gross tons in the SEA 21I disposal queue. Not included for scrapping is Patrol Gunboat (PG) Canon which is less than 1,500 gross tons

Other Navy Ships Utilized by Other Organizations (Not Part of Inactive Fleet Inventory)

1	Ex-Paul F. Foster (DD-964)	C	Destroyer	On-Loan	1974	43	Retain							2003
2	Ex-Cassin Young (DD-793)	C	Destroyer	On-Loan	1943	74	Retain							1960
3	Ex-Shadwell (LSD-15)	MT	Dock Landing Ship	On-Loan	1944	73	Retain							1970
4	Ex-Narragansett (T-ATF-167)	MT	Fleet Ocean Tug	On-Loan	1979	38	Retain							1999
5	Ex-McKee (AS-41)	MT	Submarine Tender	On-Loan	1980	37	Retain							1999
			On-Loan *	5			* 5 represents other Navy ships on loan to other organizations.							

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 18	FY 19	FY 20	FY 21	FY 22	
1	RV Sally Ride	MT	Research Vessel	Active	2015	2								2046
2	RV Neil Armstrong	MT	Research Vessel	Active	2014	3								2045
3	RV Atlantis	MT	Research Vessel	Active	1997	20								2042
4	RV Roger Revelle	MT	Research Vessel	Active	1996	21								2041
5	RV Thomas G Thompson	MT	Research Vessel	Active	1991	26								2036
6	RV Kilo Moana	MT	Research Vessel	Active	2002	15								2032

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	0
SINKEX	0
Foreign Military Sales	0
Scrap	0
Donation	0
TBD	0
Total Inactive	0
Total Active	6
Total Number of Ships*	6

Planned Removal from Service Summary						
Avail for	Fiscal Year Removed from Service					
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22	
0	0	0	0	0	0	

* This represents the total number of vessels greater than 1,500 gross tons owned by 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 18	FY 19	FY 20	FY 21	FY 22	
1	Rainier	MT	Research Vessel	Active	1967	50								2028
2	Fairweather	MT	Research Vessel	Active	1968	49								2025
3	Thomas Jefferson	MT	Research Vessel	Active	1991	26								2028
4	Gordon Gunter	MT	Research Vessel	Active	1989	28								2025
5	Okeanos Explorer	MT	Research Vessel	Active	1988	29								2025
6	Oscar Elton Sette	MT	Research Vessel	Active	1987	30								2023
7	Hi'ialakai	MT	Research Vessel	Active	2002	15								2025
8	Reuben Lasker	MT	Research Vessel	Active	2012	5								TBD
9	Pisces	MT	Research Vessel	Active	2007	10								TBD
10	Oscar Dyson	MT	Research Vessel	Active	2004	13								TBD
11	Henry B. Bigelow	MT	Research Vessel	Active	2005	12								TBD
12	Bell M. Shimada	MT	Research Vessel	Active	2010	7								TBD
13	Ronald Brown	MT	Research Vessel	Active	1997	20								TBD

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	0
SINKEX	0
Foreign Military Sales	0
Scrap	0
Donation	0
TBD	0
Total Inactive	0
Total Active	13
Total Number of Ships*	13

Planned Removal from Service Summary						
Avail for	Fiscal Year Removed from Service					
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22	
0	0	0	0	0	0	

* 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 18	FY 19	FY 20	FY 21	FY 22	
1	RV Sikuloaq	MT	Research Vessel	Active	2012	5								2044
2	RV Marcus Langseth	MT	Research Vessel	Active	1991	26								2030

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	0
SINKEX	0
Foreign Military Sales	0
Scrap	0
Donation	0
TBD	0
Total Inactive	0
Total Active	2
Total Number of Ships*	2

Planned Removal from Service Summary						
Avail for	Fiscal Year Removed from Service					
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22	
0	0	0	0	0	0	

* 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 18	FY 19	FY 20	FY 21	FY 22	
1	USS Oak Ridge	MT	Floating Dry-Dock	Active	1944	73			X					2018
2	Sherman WHEC 720	MT	High Endurance Cutter	Active	1967	50			X					2018
3	Midgett WHEC 726	MT	High Endurance Cutter	Active	1971	46				X				2019
4	Mellon WHEC 717	MT	High Endurance Cutter	Active	1967	50					X			2020
5	Munro WHEC 724	MT	High Endurance Cutter	Active	1971	46						X		2021
5	USS Oak Ridge	MT	Floating Dry-Dock	Active	1944	73								TBD
6	Polar Sea WAGB-11	MT	Heavy Ice Breaker	Inactive	1977	40	Retain							TBD
7	Polar Star WAGB-10	MT	Heavy Ice Breaker	Active	1976	41								TBD
8	Forward WMEC 911	MT	Medium Endurance Cutter	Active	1989	28								TBD
9	Alex Haley WMEC-39	MT	Medium Endurance Cutter	Active	1968	49								TBD
10	Bear WMEC 901	MT	Medium Endurance Cutter	Active	1980	37								TBD
11	Escanaba WMEC 907	MT	Medium Endurance Cutter	Active	1985	32								TBD
12	Harriet Lane WMEC 903	MT	Medium Endurance Cutter	Active	1984	33								TBD
13	Legare WMEC 912	MT	Medium Endurance Cutter	Active	1989	28								TBD
14	Mohawk WMEC 913	MT	Medium Endurance Cutter	Active	1989	28								TBD
15	NorthlandWMEC 904	MT	Medium Endurance Cutter	Active	1982	35								TBD
16	Seneca WMEC 906	MT	Medium Endurance Cutter	Active	1984	33								TBD
17	Spencer WMEC 905	MT	Medium Endurance Cutter	Active	1984	33								TBD
18	Tahoma WMEC 908	MT	Medium Endurance Cutter	Active	1987	30								TBD
19	Tampa WMEC 902	MT	Medium Endurance Cutter	Active	1984	33								TBD
20	Thetis WMEC 910	MT	Medium Endurance Cutter	Active	1986	31								TBD
21	Campbell WMEC 909	MT	Medium Endurance Cutter	Active	1986	31								TBD
22	Kimball WMSL 756	MT	National Security Cutter	Active	2017	0								TBD
23	Bertholf WMSL 750	MT	National Security Cutter	Active	2006	11								TBD
24	Waesche WMSL 751	MT	National Security Cutter	Active	2008	9								TBD
25	Stratton WMSL 752	MT	National Security Cutter	Active	2010	7								TBD
26	Hamilton WMSL 753	MT	National Security Cutter	Active	2013	4								TBD
27	James WMSL 754	MT	National Security Cutter	Active	2014	3								TBD
28	Munro WMSL-755	MT	National Security Cutter	Active	2015	2								TBD
29	Mackinaw WLBB-30	MT	Heavy Ice Breaker	Active	2005	12								TBD
30	Healy WAGB-20	MT	Medium Icebreaker	Active	1997	20								TBD

Legend	
MT	Merchant Type Vessel
C	Combatant Vessel
Active	Operating/Readiness/Support status
Inactive	Non-operating/Non-retention status
X	Foreign Military Sales
X	SINKEX
X	Scrap
X	Donation
X	Remove From Service

Disposition Summary	
Retain	1
SINKEX	0
Foreign Military Sales	0
Scrap	0
Donation	0
TBD	0
Total Inactive	1
Total Active	30
Total Number of Ships*	31

Planned Removal from Service Summary					
Avail for	Fiscal Year Removed from Service				
Disposal	FY 18	FY 19	FY 20	FY 21	FY 22
0	2	1	1	1	0

* This represents the total number of vessels greater than 1,500 gross tons owned by USCG