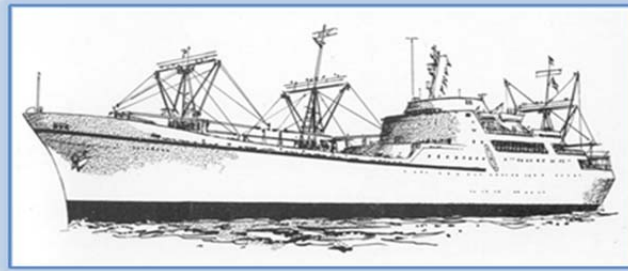


OFFICE OF SHIP DISPOSAL PROGRAMS

ANNUAL REPORT FOR FISCAL YEAR 2016

December 2016



U. S. Department of Transportation

Maritime Administration



MARITIME ADMINISTRATION
OFFICE OF SHIP DISPOSAL PROGRAMS

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OFFICE OF SHIP DISPOSAL PROGRAMS

ANNUAL REPORT FOR FISCAL YEAR 2016

EXECUTIVE SUMMARY

The Maritime Administration (MARAD) publishes this report annually to provide previous fiscal year information on the disposition of MARAD 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).

HISTORIC 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 2016, 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. This total is a historic low. Noteworthy progress of the Program includes exceeding the measures specific to the March 2010 U.S. District Court for the Eastern District of California Consent Decree requirements, for the removal of obsolete ships from the Suisun Bay Reserve Fleet (SBRF). By the end of FY 2016, 55 ships had been removed from the SBRF for disposal, which leaves only two of the original 57 ships remaining to be removed by the end of FY 2017. MARAD continues to aggressively pursue removal of the remaining vessels already scheduled within the limits of appropriated funds.

NON-RETENTION VESSEL REMOVALS FROM THE NDRF IN FY 2016

In FY 2016, MARAD removed a total of two obsolete NDRF vessels; one from the Beaumont Reserve Fleet (BRF) and the other from the SBRF. Table 1 below identifies the fleet, date and name of the vessels removed for disposal in FY 2016.

Table 1: Vessel Removals in FY 2016

Vessels Removed in FY 2016				
Fleet	Month Removed	Date Removed	Vessel	Contract Type
BRF	December	12/8/2015	FLINT	Sale
SBRF	June	6/16/2016	CAPE BLANCO	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 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 2016, MARAD awarded a total of two best value recycling contracts comprised of one vessel sales contract, which returned the highest offered single ship sale price and one service contract, which returned the lowest offered single ship price revision. MARAD procured recycling and shipyard services using appropriated funds for the removal, docking and dismantlement of one SBRF vessel at a total cost of \$1,650,651.

SALES REVENUE AND DISTRIBUTION

MARAD ship recycling sales revenue in FY 2016 was \$51,819 on the sale of one obsolete NDRF vessel. Revenues from the sale of obsolete NDRF vessels do not supplement Ship Disposal Program appropriations. The National Maritime Heritage Act (NMHA) requires the allocation and distribution of obsolete vessel sales proceeds into the Vessel Operations Revolving Fund (VORF). The distribution of the vessels sales 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 academy expenses; and 25% for maritime heritage property preservation and presentation, which includes no less than 12.5% transferred to the National Park Service's (NPS) National Maritime Heritage Grant Program (NMHGP) per the Memorandum of Agreement (MOA) with MARAD and 12.5% for preservation and presentation of maritime heritage property owned by MARAD or to provide additional support to the NPS's NMHGP. In FY 2016, approximately \$798K was obligated from the NDRF account for acquisition, repair and maintenance activities from previously distributed funds. No funds were provided to the USMMA or six state maritime academies during FY 2016. \$968K in additional funds was provided to the NPS in support of the FY 2015 grant cycle of the NMHGP; and \$3.3M was obligated for MARAD maritime heritage property preservation from previously distributed funds¹

INDUSTRY OUTREACH

In 2013, MARAD issued a revised ship recycling solicitation that streamlined the solicitation process, reduced the size and complexity of ship recycling contracts and increased the transparency of the process. MARAD has issued updates to the solicitation including better explanations of the "best value" process for award selections. In addition, MARAD posts all awarded contracts, which includes the awarded price and schedule of performance, on its acquisitions website. All offerors can compare their offers to the awarded offer. MARAD also offers individual debriefings to any offeror who requests it to discuss their offer and the best value decision.

In November 2015, 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

¹ The \$968K was transferred to the NPS in FY 2016 at their request to fund additional NMHGP projects from the FY 2015 grant cycle.

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 ship disposal program 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.

FEDERAL SHIP OUTREACH PROGRAM

MARAD 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).

Each Agency was notified of MARAD's statutory (40 USC Section 548 - Surplus vessels) role and responsibility as the exclusive agent for the disposal of surplus Government owned vessels of 1,500 gross tons or more which the Maritime Administration determines to be merchant vessels or capable of conversion to merchant use. MARAD informed each agency of its ship sales and vessel disposal services which provide secure and reliable disposal of obsolete vessels through qualified ship recycling facilities while protecting worker health and safety and the environment.

NUCLEAR SHIP SAVANNAH

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. The NSS is licensed and inspected by the U.S. Nuclear Regulatory Commission (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 Ship Disposal Program (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 Ready Reserve Force (RRF) or otherwise designated to be used for a particular purpose. From the first quarter of FY 2001 through FY 2016, MARAD awarded dismantling contracts for 215 obsolete ships, removed 219 ships from MARAD and Navy NISMO fleet sites and completed disposal action on 219 ships. During this 16-year period, 133 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.² 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 United States. 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 domestic scrap steel market has been in a downward spiral since its \$400 per metric ton peak in January 2014 with the most dramatic decline occurring in 2015. Scrap steel prices plunged to levels not seen in the previous 10 to 15 years. In January 2015, scrap steel prices were approximately \$320 per metric ton and by October 2015 plummeted to a low of approximately \$135 per metric ton; a 58% decrease. In FY 2016, scrap steel prices slowly rebounded from the October 2015 low and from May through September hovered in the \$190 to

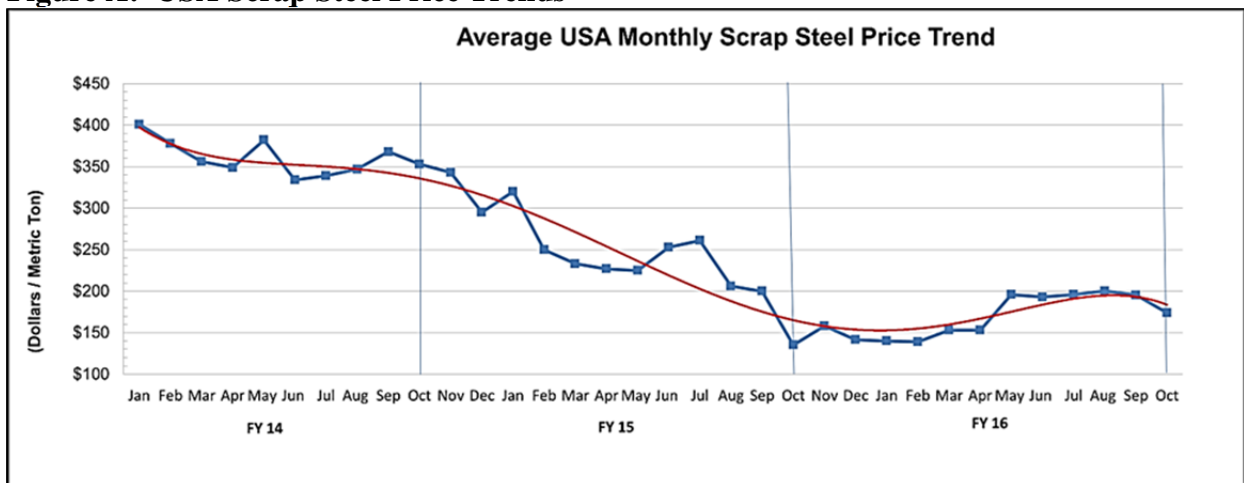
² The 18 ships consist of 15 MARAD vessels in the NDRF and three Navy vessels located in the NISMO in Philadelphia, PA.

\$200 per metric ton price range. For the year domestic scrap steel prices in September 2016 were at approximately the same price as September 2015. Recovery in scrap steel prices is not expected in the near term due to continued downward pressure on demand within international economies, a weak domestic economy, lower commodity prices, strong dollar and uncertainty regarding interest rates exert pessimistic outlooks for near term price recovery. Short term price fluctuations are expected and will be subject to short term supply and demand in the scrap metal markets. International scrap steel prices are expected to remain low through the second quarter of FY 2017, with modest upward pricing through the 3rd quarter of FY 2017 in the global scrap steel market. Domestic scrap steel prices are expected to remain under \$200 per metric ton with an anticipated slight price increase in the 2nd to 3rd quarter of FY 2017.

The current low price of scrap steel continues the uneconomical market for ship recyclers to recycle MARAD/Navy non-retention vessels without award of a service contract to subsidize costs. Figure A below shows the trend in US scrap steel prices during FYs 2014-2016.

Currently, 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 hazardous material remediation costs. Predicting the 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.

Figure A: USA Scrap Steel Price Trends



Source Data: Data for the chart is compiled from the following, www.scrapmonster.com, www.recycle.net, www.scrapmonster.com/china-scrap-prices.

The sharp decline in the price of scrap steel in FY 2015 and weak recovery in FY-2016 maintains the MARAD ship sales program at the same point as FY 2015 where ship sales are still not feasible. MARAD is now required to procure ship recycling services using appropriated funds. In FY 2016, MARAD issued three separate ship recycling sale announcements requesting sales offers for a total of six vessels, which resulted in the sale of only one vessel; the FLINT, for \$51,819. Since February 2015 the FLINT is the only vessel sold by MARAD for recycling. The

DLA has had similar results when selling Navy vessels for recycling. They sold six vessels in February 2015 for \$52,888. Since then they have issued two separate sales announcements, the first in August of 2015, which expired in February 2016 when no price offers were received. The second was issued in May of 2016, was cancelled in August 2016 when they received no technically qualified offers. MARAD had planned to remove three SBRF vessels for disposal in FY 2015 leaving two vessels for disposal in FY 2016. However, the continued decline in scrap steel prices coupled with insufficient funding limited MARAD to the removal of only one SBRF vessel. Two vessels remain in the SBRF to be removed by September 30, 2017, to meet the California Court Consent Decree.

Domestic Recycling Industry

The sharp drop in scrap steel prices has severely impacted the domestic ship recycling industry. In March 2015, ESCO Marine, Inc. (ESCO), the largest MARAD qualified ship recycling facility, entered court supervised re-organization proceedings. ESCO's closing removed ship recycling capacity which is no longer available to MARAD for disposal of its non-retention ships. At the time of its closing, ESCO was dismantling the Navy aircraft carrier ex-SARATOGA and two former MARAD vessels the SHENANDOAH and YELLOWSTONE. As of October 1, 2016, ESCO has begun gearing up to begin ship recycling activities by cleaning their recycling facility of scrap materials, making infrastructure improvements, and performing maintenance on equipment. However, ESCO is limited to processing scrap material in the facility as MARAD and the Navy will not allow ESCO to resume dismantlement of the two former MARAD vessels and the ex-SARATOGA. ESCO is actively seeking to novate the ex-SARATOGA contract to a new company called HRP Brownsville which will satisfy the Navy contracting requirement for US controlled ownership of the facility. While there is visible progress in ESCO's bankruptcy re-organization and facility preparations, it remains unclear when ESCO will re-open and resume operations.

At the start of FY 2016, there were five qualified MARAD ship recycling facilities all located on the Gulf Coast in Louisiana and Texas. This is three less than the eight total qualified ship recycling facilities at the beginning of FY 2015. In September 2015, Marine Metal, Inc., (MMI) lost its MARAD technical acceptance qualification status due to concerns regarding financial viability. Seeking fresh capital MMI was sold to new owners in November 2015 who chose not to regain their technical qualification status. Further, MMI was sold again to new owners in November of 2016. The new owners have expressed an interest in regaining the MARAD technical qualification status and MARAD has reached out to them to provide assistance as they prepare their General Technical Proposal. Bay Bridge Texas, LLC, (BBT) underwent organizational restructuring, shedding personnel and limiting operations to reduce expenses and has been seeking a buyer since December 2015. Due to concerns regarding operational effectiveness, key personnel and several crane accidents, one involving a death, BBT lost their qualified facility status. The Southern Recycling Calcasieu ship recycling facility located in Sulphur, LA, was closed in July 2016 as a result of the ongoing depressed scrap steel market.

Domestic ship recycling capacity is currently adequate to meet MARAD's requirements given the decreasing number of non-retention ships available for disposal and the impact of falling scrap steel prices on ship sales and limited appropriations to procure ship recycling services. However, there is continuing concern that the current available industrial capacity and competition for MARAD's vessels will decrease as production continues on the

dismantling/recycling of the three Navy aircraft carriers at the two largest qualified recycling facilities and the award of one additional carrier recycling contract by the Navy in 2016. 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

MARAD 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 of 40 USC Section 548 – Surplus vessels. Researching the other Agency’s vessel operations web sites, vessel inventories, and agency vessel disposal guidelines MARAD compiled a listing of vessels pertinent to each agency. The universe of vessels was compiled into 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, and estimated retirement date.

Each Agency was notified of MARAD’s statutory authority as the disposal agent for surplus Government owned vessels 1,500 gross tons or more which the Maritime Administration determines to be merchant vessels or capable of conversion to merchant use. MARAD provided each Agency a list of their vessels which met the statutory requirement. Each Agency was requested to confirm the vessels identified by MARAD are owned by the agency and to verify the data provided.

MARAD informed each agency of its ship sales and vessel disposal services which provide secure and reliable disposal of obsolete vessels through qualified ship recycling facilities while protecting worker health and safety and the environment. Each agency was provided the following general scenarios whereby MARAD would act as the vessel disposal agent:

- The vessel is sold for domestic re-use.
- The vessel is sold for domestic recycling.
- Recycling services are procured for the dismantlement of the vessel.
- The vessel is transferred to a MARAD fleet anchorage.

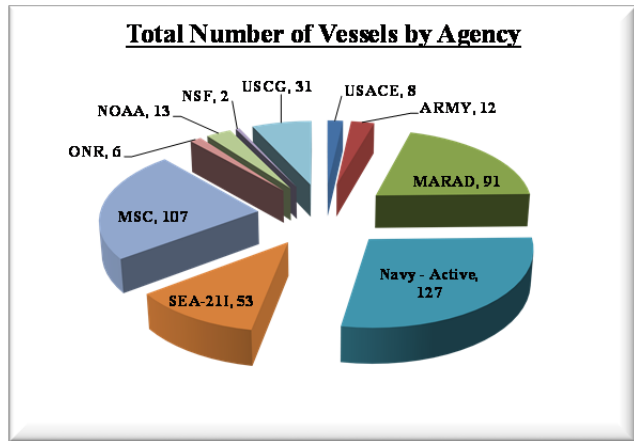
Each Agency was provided a copy of and invited to participate in a Memorandum of Agreement (MOA) whereby each agency’s roles and responsibilities for successful vessel disposal are clearly identified. MARAD will require an executed MOA from each agency prior to disposing of that agency’s vessels.³

Figure A summarizes the Active and In-Active Vessels by Agency. The pie-chart on the right provides a graphical depiction of the total number of vessels owned by each agency.

³ MARAD can request each agency enter into a MOA 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.

Figure A: Total Active and In-Active Vessels by Agency

Active and In-Active Vessels by Agency			
Agency	Active	In-Active	Total Ships
USACE	8	0	8
ARMY	12	0	12
MARAD	78	13	91
NAVY			
Navy - Active	127	0	127
SEA-21I	5	48	53
MSC	104	3	107
ONR	6	0	6
NOAA	13	0	13
NSF	2	0	2
USCG	30	1	31
Total	385	65	450



The largest concentration of active and in-active vessels is within the Navy. The total number of active and in-active vessels within the Navy is 293 or 65 percent of the total. MARAD is second with 91 active and in-active vessels representing 20 percent of the total. Combined MARAD and Navy account for 385 active and in-active vessels or 85 percent of the total.

Figure B: In-Active Vessels by Agency

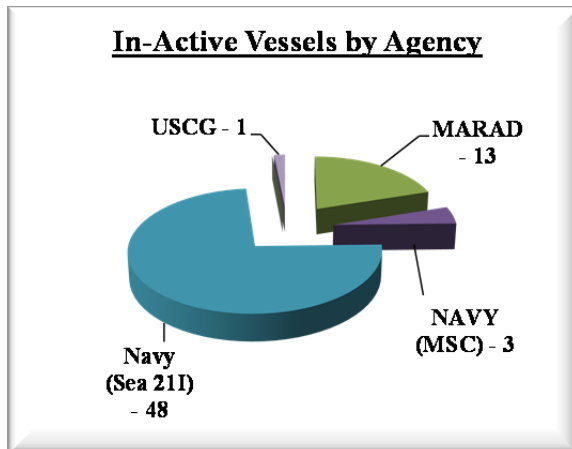


Figure B identifies by agency the 65 in-active vessels including the 13 non-retention vessels at MARAD, which are available for disposal and the 48 vessels at Sea 21I of which 14 vessels are in retention status and 39 vessels are designated for disposal. Of the 39 Navy vessels designated for disposal two are on hold for donation, eight are targeted for Deep Sink Exercises (SINKEX), 11 are earmarked for Foreign Military Sales and 19 are scheduled for scrap. There are six vessels at MSC in retention status and one vessel at the USCG in retention status. MARAD's 13 vessels represent 20 percent of the in-active vessels while

Navy with 48 represents 75 percent of the in-active vessels. Combined MARAD and Navy have 61 vessels or 94 percent of the total vessels designated as in-active. MARAD has 13 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 32.

Figure C lists the 53 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 or merchant type, design designation, active and in-active status and disposal disposition. A color code is used to represent the vessel disposal disposition. Currently only MARAD and Sea 21I have vessels available for disposal. The universe of Government-owned active and in-active merchant type vessels, vessel that can be converted to merchant type use and

Navy combatant vessels are listed by Agency in Appendix A-J.⁴

Figure C: In-Active Vessel Dispositions

United States Maritime Administration - MARAD						
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal
1	Tripoli	MT	Amphibious Assault Ship	In-Active	Scrap	X
2	Cape Gibson	MT	Break Bulk	In-Active	Scrap	X
3	Cape Johnson	MT	Break Bulk	In-Active	Scrap	X
4	Cape Archway	MT	Break Bulk	In-Active	Scrap	X
5	Cape Breton	MT	Break Bulk	In-Active	Scrap	X
6	Cape Borda	MT	Break Bulk	In-Active	Scrap	X
7	Cape Alexander	MT	Break Bulk	In-Active	Scrap	X
8	Cape Alava	MT	Break Bulk	In-Active	Scrap	X
9	Equality State	MT	Crane Ship	In-Active	Scrap	X
10	Observation Island	MT	Missile Instrumentation Ship	In-Active	Scrap	X
11	Cape Lobos	MT	Roll-On/Roll-Off	In-Active	Scrap	X
12	Simon Lake	MT	Submarine Tender	In-Active	Scrap	X
13	Sumner	MT	Surveying Ship	In-Active	Scrap	X
Navy In-Active Ships Office (SEA 211)						
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal
1	Ex-John F. Kennedy (CV-67)	C	Aircraft Carrier	In-Active	Donation	X
2	Ex-Independence (CV62)	C	Aircraft Carrier	In-Active	Scrap	X
3	Ex-Charleston (LKA-113)	MT	Amphibious Cargo Ship	In-Active	Scrap	X
4	Ex-Durham (LKA-114)	MT	Amphibious Cargo Ship	In-Active	SINKEX	X
5	Ex-St. Louis (LKA-116)	MT	Amphibious Cargo Ship	In-Active	SINKEX	X
6	Ex-El Paso (LKA-117)	MT	Amphibious Cargo Ship	In-Active	Scrap	X
7	Ex-Mobile (LKA-115)	MT	Amphibious Cargo Ship	In-Active	Scrap	X
8	Ex-Shreveport (LPD-12)	MT	Amphibious Transport Dock	In-Active	Scrap	X
9	Ex-Charles F. Adams (DDG-2)	C	Destroyer	In-Active	Donation	X
10	Ex-Barry (DD-933)	C	Destroyer	In-Active	Scrap	X
11	Ex-Thomas S Gates (CG-51)	C	Guided Missile Destroyer	In-Active	Scrap	X
12	Ex-Ticonderoga (CG-47)	C	Guided Missile Destroyer	In-Active	Scrap	X
13	Ex-Yorktown (CG-48)	C	Guided Missile Destroyer	In-Active	Scrap	X
14	Ex-Vandegrift (FFG-48)	C	Guided Missile Frigate	In-Active	FMS	X
15	Ex-Elrod (FFG-55)	C	Guided Missile Frigate	In-Active	FMS	X
16	Ex-Simpson (FFG-56)	C	Guided Missile Frigate	In-Active	FMS	X
17	Ex-Kauffman (FFG-59)	C	Guided Missile Frigate	In-Active	FMS	X
18	Ex-Rodney M. Davis (FFG-60)	C	Guided Missile Frigate	In-Active	FMS	X
19	Ex-McClusky (FFG-41)	C	Guided Missile Frigate	In-Active	SINKEX	X
20	Ex-Ingraham (FFG-61)	C	Guided Missile Frigate	In-Active	SINKEX	X
21	Ex-De Wert (FFG-45)	C	Guided Missile Frigate	In-Active	FMS	X
22	Ex-Robert G. Bradley (FFG-49)	C	Guided Missile Frigate	In-Active	FMS	X
23	Ex-Halyburton (FFG-40)	C	Guided Missile Frigate	In-Active	FMS	X

⁴ The list of Navy combatant vessels does not include 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; the one exception being the Ex-Enterprise (CVN-65). A solicitation has been released requesting technical proposals for the conventional dismantling of the non-nuclear sections of the vessel. The propulsion sections of the vessel would remain intact, made watertight, and transited on a heavy lift ship to Puget Sound Naval Shipyard for decontamination of the nuclear propulsion systems and final structural dismantlement and remediation.

No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal
24	Ex-Ford (FFG-54)	C	Guided Missile Frigate	In-Active	SINKEK	X
25	Ex-Klakring (FFG-42)	C	Guided Missile Frigate	In-Active	FMS	X
26	Ex-Carr (FFG-52)	C	Guided Missile Frigate	In-Active	FMS	X
27	Ex-Curts (FFG-38)	C	Guided Missile Frigate	In-Active	SINKEK	X
28	Ex-Samuel B Roberts (FFG-58)	C	Guided Missile Frigate	In-Active	Scrap	X
29	Ex-Nicholas (FFG-47)	C	Guided Missile Frigate	In-Active	Scrap	X
30	Ex-Underwood (FFG-36)	C	Guided Missile Frigate	In-Active	Scrap	X
31	Ex-John L Hall (FFG-32)	C	Guided Missile Frigate	In-Active	Scrap	X
32	Ex-Boone (FFG-28)	C	Guided Missile Frigate	In-Active	Scrap	X
33	Ex-Stephen W Groves (FFG-29)	C	Guided Missile Frigate	In-Active	Scrap	X
34	Ex-Doyle (FFG-39)	C	Guided Missile Frigate	In-Active	Scrap	X
35	Ex-Hawes (FFG-53)	C	Guided Missile Frigate	In-Active	Scrap	X
36	Ex-Mohawk (T-ATF-170)	MT	Fleet Ocean Tug	In-Active	FMS	X
37	Ex-Hayes (T-AGOR-16)	MT	Oceanographic Research Ship	In-Active	Scrap	X
38	Ex-Boulder (LST-1190)	MT	Tank Landing Ship	In-Active	Scrap	X
39	Ex-Racine (LST-1191)	MT	Tank Landing Ship	In-Active	SINKEK	X
Legend		Disposition Summary				
MT	Merchant Type Vessel		Retain	0		
C	Combatant Vessel		SINKEK	7		
Active	Vessels in use or in an operating/readiness status		Foreign Military Sales	11		
In-Active	Vessels laid-up (non-operating/non-retention status)		Scrap	32		
X	Foreign Military Sales		Donation	2		
X	SINKEK		TBD	0		
X	Scrap		Total In-Active	52		
X	Donation		Total Active	0		
X	Remove From Service		Total Number of Ships	52		

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

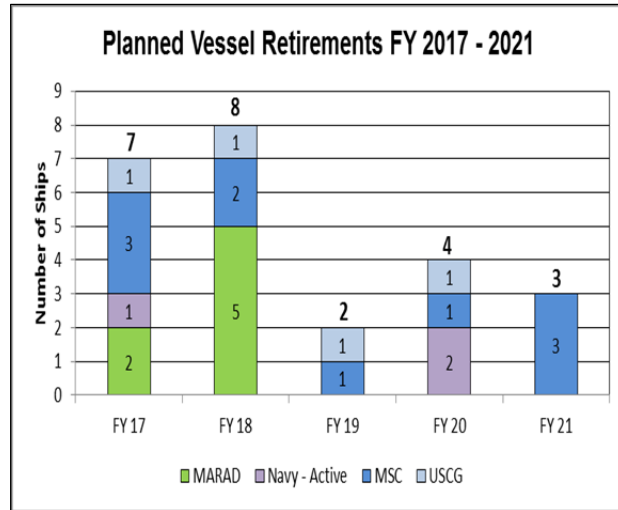
Planned Vessel Retirement Schedules

Agency vessel retirement schedules reflect the year the vessel will be taken out of service. In each case the exact date the vessel will be available to MARAD or 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 the actual solicitation for 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) are incorporated into planning and budgeting decisions. Congressional authorizations/appropriations, vessel utilization, service life extensions, vessel new build replacements and funding all affect the out of service date decision. The exact retirement dates and disposal actions are subject to 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 address all potential vessel disposal costs. These studies and analysis are preliminary to securing sufficient resources to accomplish

the final vessel disposal. Vessel specific disposal dates are therefore unknown until completion of all vessel disposal analysis. Figure D provides a summary of the planned vessel service retirement schedules for FYs 2017-2021 for each agency. Figure E provides a listing by each agency of the vessels planned for service retirement in FYs 2017-2021.

Figure D: Vessel Service Retirement Summary by Agency FY-2017- 2021

Agency	Fiscal Year Removed from Service					5-Year Total
	FY 17	FY 18	FY 19	FY 20	FY 21	
USACE	0	0	0	0	0	0
ARMY	0	0	0	0	0	0
MARAD	2	5	0	0	0	7
NAVY						
Navy - Active	1	0	0	2	0	3
SEA 2II	0	0	0	0	0	0
MSC	3	2	1	1	3	10
ONR	0	0	0	0	0	0
NOAA	0	0	0	0	0	0
NSF	0	0	0	0	0	0
USCG	1	1	1	1	0	4
FY Removal	7	8	2	4	3	
	Total 5-Year Removed from Service					24



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 2II since they have not yet been transferred for final disposition.

Figure E: Planned Vessel Retirements by Agency FYs 2017 – 2021

United States Maritime Administration - MARAD												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Cape Fear	MT	Barge Ship	Active	Scrap			X				2018
2	Cape Florida	MT	Barge Ship	Active	Scrap		X					2017
3	Cape Jacob	MT	Break Bulk	Active	Scrap			X				2018
4	Harkness	MT	Surveying Ship	Active	Scrap		X					2017
5	Chesapeake	MT	Tanker	Active	Scrap			X				2018
6	Samuel L Cobb	MT	Tanker	Active	Scrap			X				2018
7	Paul Buck	MT	Tanker	Active	Scrap			X				2018

United States Department of the Navy - MSC												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	USS Ponce (AFSB-15)	MT	Afloat Forward Staging Bas	Active	Scrap			X				2018
2	USNS Sioux (T-ATF 171)	MT	Fleet Ocean Tug	Active	Scrap						X	2021
3	USNS Apache (T-ATF 172)	MT	Fleet Ocean Tug	Active	Scrap						X	2021
4	USNS Catawba (T-ATF 168)	MT	Fleet Ocean Tug	Active	Retain				X			2019
5	USNS Navajo (T-ATF 169)	MT	Fleet Ocean Tug	Active	Retain		X					2017
6	USNS John Lenthall (T-AO 189)	MT	Fleet Oiler	Active	Scrap						X	2021
7	USNS Walter S. Diehl (T-AO 193)	MT	Fleet Oiler	Active	Retain				X			2020
8	USNS Grapple (T-ARS 53)	MT	Rescue/Salvage	Active	Retain		X					2017
9	USNS Safeguard (T-ARS 50)	MT	Rescue/Salvage	Active	Retain		X					2017
10	USNS Lawrence H. Gianella (T-AOT 1125)	MT	Tanker	Active	TBD			X				2018

United States Navy - Active Vessels												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Ex-Enterprise (CVN -65)	C	Aircraft Carrier	Active	Retain		X					2017
2	USS Bunker Hill (CG 52)	C	Guided Missile Cruiser	Active	Retain				X			2020
3	USS Mobile Bay (CG 53)	C	Guided Missile Cruiser	Active	Retain				X			2020

United States Coast Guard - USCG												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Morgenthau WHEC 722	MT	High Endurance Cutter	Active	TBD		X					2017
2	Sherman WHEC 720	MT	High Endurance Cutter	Active	TBD			X				2018
3	Midgett WHEC 726	MT	High Endurance Cutter	Active	TBD				X			2019
4	Mellon WHEC 717	MT	High Endurance Cutter	Active	TBD				X			2020

Legend		Disposition Summary		FY 2016	Planned Removal from Service Summary					5-Year Total
				Avail for Disposal	Fiscal Year Removed from Service					
					FY 17	FY 18	FY 19	FY 20	FY 21	
MT	Merchant Type Vessel	Retain	8	0	7	8	2	4	3	24
C	Combatant Vessel	SINKEX	0							
Active	Vessels in use or in an operating/readiness status	Foreign Military Sales	0							
In-Active	Vessels laid-up (non-operating/non-retention status)	Scrap	11							
X	Foreign Military Sales	Donation	0							
X	SINKEX	TBD	5							
X	Scrap	Total In-Active	0							
X	Donation	Total Active	24							
X	Remove From Service	Total Number of Ships*	24							

* This represents the total number of vessels greater than 1,500 gross tons expected to be retired from service in the next five fiscal years. Retirement dates are subject to change relative to mission utility, appropriations and availability of replacement vessels where applicable.

European Ship Recycling Regulation

In May MARAD participated in a teleconference with representatives of the European Commission (EU), the NGO Shipbreaking Platform, the Basel Action Network, US State Department, EPA and US 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/scraping differential between clean (qualified) recycling facilities and unclean (Indian, Pakistan) recycling facilities. Ship recycling facilities, both internal and external to the EU seeking to become qualified under the EU Ship Recycling Regulation 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.

The EU Commission expects to submit its recommendation of a proposed ship recycling financing recommendation to the EU Parliament by the end of 2016. However, there is no timetable for the implementation of the Ship Recycling Regulations and license scheme. 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.

Specifics for the implementation and administration of the proposed license or fee remain a work in process. The US State Department is reviewing the EU documents pertaining to the proposed financing mechanisms and has concerns with regard to the legal aspects of the proposed scheme, the economic impact to vessel owners, and management and disbursement of the fees in the EU account.

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 drydock 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 drydock facility for drydocking services to remove marine growth from the hull and exfoliated paint from topside surfaces. The cleaning of marine growth and loose exterior paint on drydock 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 drydocking 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 205 ships awarded in recycling contracts represent 95% of the 215 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	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	Totals
Recycling (Fee for Service)	5	2	15	11	16	13	14	4	8	11	10	0	0	3	2	1	115
Recycling (Sales)	0	0	0	2	1	5	4	16	5	0	8	16	19	8	5	1	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	215

Through September 30, 2016

The Agency has three qualified ship recycling facilities in Brownsville, TX and one each in New Orleans, and Amelia, LA.⁵ 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

⁵ ESCO retains its technical qualification during the court re-organization proceedings due to statutory requirements which limit actions deemed by the Court as burdensome to the company undergoing re-structuring.

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 domestic facilities with the greatest current capacity. The award by the Navy of two-year recycling contracts in FYs 2014 – 2016 for five aircraft carriers and the contract awards for smaller combatant vessels by DLA in FY 2015 limited competition for MARAD contract awards similar to the circumstances observed in FY 2014.

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, among other areas, 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 publically 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 97 vessels for recycling from November 2008 through FY 2016 from NDRF and Navy fleet sites. Of the 97 awards, 62 were sales and 35 were service contracts and 81%, (79 of 97), 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 81% 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 vessel’s size/condition, the type and quantity of hazardous materials, the quantity and type of recyclable materials, the market price of scrap metals, the number of competitive bids for each vessel offered in a recycling solicitation, the length/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 drydock 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 appropriations for the ship disposal program for the current and past five fiscal years.

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 M	\$2.5M	\$2.4 M	\$2.0M	\$2.0M /1	\$3.0M /2	\$2.5M /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 \$5.0M Ship Disposal appropriation in the Continuing Appropriations and Military Construction, Veterans Affairs, and Related Agencies Appropriations Act, 2017, and Zika Response and Preparedness Act. The \$2.5M balance was apportioned to the *NS Savannah* for ongoing protective storage activities required under the Nuclear Regulatory Commission license.

Appropriations for ship disposal had been at the \$12M annual level from FY 2007 through FY 2011. Despite consistently exceeding the annual ship award and removal goals, annual carryovers accumulated because of favorable industry and market conditions from FY 2006 through FY 2008 allowing the sale of additional vessels. 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 2008-2009 economic downturn 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. 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. The \$902K along with the FY 2016 \$3.0M allocated to ship disposal allowed for the procurement of ship recycling and dry-dock services to remove one vessel from the SBRF. Carryover funding into FY 2017 is approximately \$644K. Carryover funds from FY 2016 and FY 2017 appropriations, if sufficient, will be used to remove the two remaining SBRF vessels.

Sales Revenues

Accrued revenue from the sale of non-retention NDRF vessels over the past six years (FY 2010-2015) has been approximately \$67 million for dismantling/recycling of 57 ships as shown in Table 4 below.

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
Annual Sales Revenue (\$):	\$0	\$7.6M	\$18.9M	\$24.6M	\$9.8M	\$6.1M	\$52K
Vessel Sales Contracts:	0	8	16	19	8	5	1
Vessel Service Contracts:	12	10	0	0	3	2	1
Total Recycling Contracts:	12	18	16	19	11	7	2

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.

Revenues from the sale of obsolete NDRF vessels do not supplement OSDP appropriations. The NMHA requires the allocation and distribution of obsolete vessel sales proceeds into the VORF. The distribution of the vessels sales proceeds from the VORF is 50% for NDRF acquisition, repair and maintenance; 25% for the USMMA and the six State maritime academy expenses; 25% for maritime heritage property preservation and presentation, which includes a minimum of 12.5% transferred to the NPS's grant program per the MOA with MARAD and 12.5% for preservation and presentation of maritime heritage property owned by MARAD. The funds provided to the USMMA and State Maritime Academies since 2009 are shown in Table 5. In FY

2016, \$798K was obligated from the NDRF account for acquisition, repair and maintenance activities from previously distributed funds. No funds were provided to the USMMA and the State Maritime Academies during FY 2016. Additional funds totaling \$968K were provided to the NPS for the FY 2015 cycle of the NPS administered NMHGP and \$3.3M was obligated for MARAD maritime heritage property preservation from previously distributed funds.⁶

Sales proceeds for MARAD vessels sold in FYs 2017 and 2018 are expected to be negatively affected by the steep drop in the price of recycled steel, pessimistic industry forecasts for a quick market recovery, diminished level of domestic recycling competition, reduced available capacity from the ongoing ESCO bankruptcy re-organization, reduced number of qualified ship recycling facilities, financial problems at smaller qualified facilities, U.S. Navy recycling contracts for additional aircraft carriers and potential DLA sales contracts for the recycling of 3-5 combatant vessels.

Table 5: VORF Funds Provided to the Maritime Academies

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	SUMMARY
USMMA	\$444,561	\$188,143	\$147,959	\$962,000	\$0	\$0	\$1,600,000	\$0	\$3,342,663
Maine	\$300,000	\$0	\$60,537	\$940,056	\$0	\$1,000,000	\$0	\$0	\$2,300,593
Mass	\$300,000	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$0	\$0	\$2,260,236
Great Lakes	\$50,000	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$0	\$0	\$2,010,236
Texas	\$0	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$0	\$0	\$1,960,236
California	\$450,000	\$0	\$131,165	\$940,056	\$0	\$1,000,000	\$0	\$0	\$2,521,221
SUNY	\$300,000	\$0	\$131,165	\$940,056	\$0	\$1,000,000	\$0	\$0	\$2,371,221
Annual Total	\$1,844,561	\$188,143	\$531,366	\$6,602,333	\$0	\$6,000,000	\$1,600,000	\$0	\$16,766,403

Fiscal Year 2017 Disposal Activities

At the start of FY 2017, MARAD had 15 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 National Marine Fisheries Service (NMFS) to remove the vessels for disposal.

The goal for FY 2017 is the disposal of four non-retention vessels through competitive vessel sales or the procurement of recycling services. The remaining two vessels in the SBRF will be the top priority for vessel disposal awards in FY 2017. All disposal contracts awarded in FY 2017 are anticipated to be for domestic vessel dismantling/recycling.

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. As shown in Figure B, MARAD's annual rate of vessel downgrades outpaced the rate of removals through FY 2007. Since 2007, the backlog of obsolete MARAD ships that accumulated in the 1990s has been steadily eliminated to the point

⁶ The \$968K was requested by the NPS and was in addition to the \$2.8M transferred to the NPS in FY 2015 to support that year's National Maritime Heritage Grant Program application and award process.

that no more than 20 total vessels are likely to be in non-retention status for the foreseeable future. Table 6 provides a five year projection of non-retention vessel disposals by fiscal year. The projections include Government owned merchant type vessels greater than 1,500 gross tons as reported from other Government agencies.

Table 6: Vessel Disposal Projections

Vessel Disposal Projections by Fiscal Year					
Fiscal Year	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Number of Vessels	4-6	4-6	4-6	4-6	4-6

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.

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 will decrease. The target number of disposals for FY 2017 is four ships followed by an additional four ships targeted for FY 2018. The 8 ships targeted for disposal in FYs 2017 – 2018 will include the remaining two SBRF vessels, which will complete the requirement for the agency to remove 57 SBRF ships identified for removal in 2010 by the California Court Consent Decree.

In FY 2016, MARAD downgraded one vessel, the SIMON LAKE, located in the JRRF to non-retention status. MARAD plans to downgrade two vessels, the HARKNESS, located in the JRRF and the CAPE FLORIDA, located in the BRF to non-retention status in October 2016. With the planned removal of 8 ships in FYs 2017 - 2018, and the downgrading and addition of possibly five vessels during that period to the disposal inventory, approximately 15 non-retention vessels will remain in the NDRF and NISMO facilities for disposal at the start of FY 2018.

Supported by industry projections for a prolonged recovery in the price of scrap steel, it is anticipated that disposal costs for both MARAD and Navy overall will increase through FYs 2017 - 2018. The increase in recycling costs is directly attributable to the continuing decline in the price of recycled steel since FY 2014 and the resulting contractor requirement for the award of ship recycling service contracts to subsidize ship recycling costs, until the price of scrap steel rebounds to sustainable levels to justify the purchase of obsolete vessels for recycling. Further, the level of domestic recycling competition and available capacity will continue to be tested as a result of the collapse in the price of recycled steel; the loss of ESCO; facility re-organizations and re-capitalizations; and completion of the three awarded U.S Navy aircraft carriers undergoing dismantlement. The Navy faces delays in completing the recycling of the vessel ex-SARATOGA due to the re-organization of ESCO. Future awards for recycling of additional aircraft carriers will be delayed due to limited available capacity and completion of the carriers currently under dismantlement at International Shipbreaking, Ltd. In August 2016 the Navy awarded a contract to International Shipbreaking, Ltd for the dismantlement of the conventionally powered aircraft carrier ex-INDEPENDENCE. The vessel is located in Bremerton, WA and is scheduled to depart for Texas in January of 2017 with arrival estimated in May 2017. In addition, the Navy issued a request for proposals for the partial dismantlement of

the nuclear powered carrier ENTERPRISE. Proposals are for sectional dismantlement of the non-nuclear sections of the ship with construction of a watertight containment for the propulsion section. The propulsion section is to be placed on a heavy lift ship for transit to Puget Sound Naval Shipyard for decontamination and dismantlement. The anticipated period of performance is September 2017 – September 2019.

The award of the ex-INDEPENDENCE and potential award of the ENTERPRISE, each with a two year period of performance, further stresses available domestic ship recycling capacity which will affect the number of vessels removed for disposal in the future. A single aircraft carrier is equivalent to the tonnage of approximately 8 to 10 average size MARAD non-retention vessels. Additionally, it is anticipated the DLA will face delays in the solicitation for sales offers for the award of recycling contracts for decommissioned Navy combatant vessels in FYs 2017-2018 as recyclers shy away from the purchase of vessels for recycling until the scrap steel market rebounds to profitable levels.

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 drydocking 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 drydocking of SBRF vessels.

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

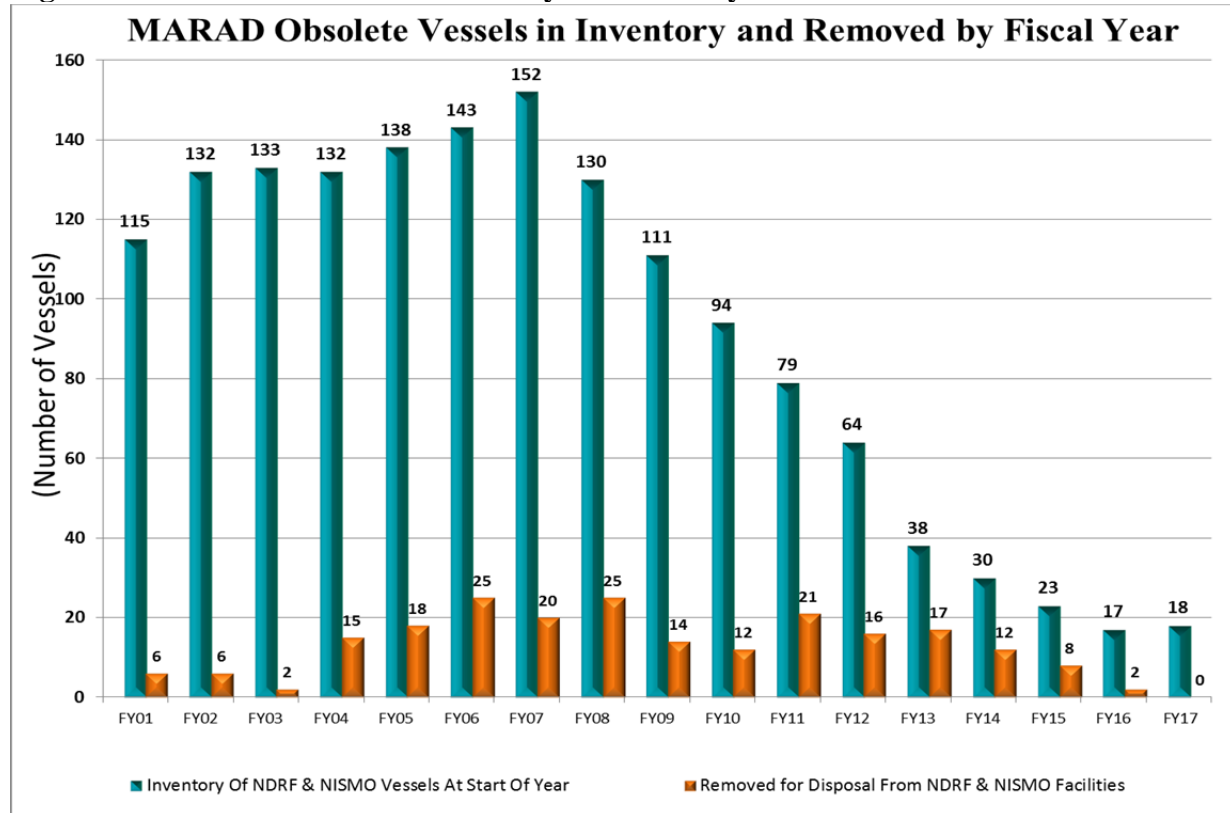
- Timing and amount of annual appropriations.
- The availability of competitive recycling facilities with available capacity and adequate production throughput.
- Feasibility of disposal options available to the Program.
- Drydock availability, throughput and cost (SBRF ships only).
- Availability of commercial towing assets and associated fuel costs.
- The costs of aquatic nuisance species sampling, assessment, and threat mitigation, including the drydocking 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 E below is a graph of the number of obsolete NDRF vessels in the disposal inventory at the start of each fiscal year and the number of obsolete non-retention vessels removed for each fiscal year from FY 2001 through September of 2016. As shown in Figure F, MARAD has

exceeded the ship removal target by an average of 3.0 vessels per year over the 16 year period -- missing the annual target in only four 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 time 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 has 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 carriers ship dismantlement awards and the prominent reduction in ship disposal annual appropriations which have averaged approximately \$2.3M during the last 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 and plunge in the price of recycled steel prices 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 the removal of only two actual ship removals in FY 2016, four short of the target.

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



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 F: Vessel Removal Projections Compared to Actual Vessel Removals

Vessel Removal Projections Compared to Actual Vessel Removals																		
Non-retention <u>vessels removed</u> annually from MARAD NDRF and Navy NISMF sites.																		
FY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Actuals (Thru FY2016)
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	TBD	219 (Δ +50)

Cumulative number of non-retention <u>SBRF vessels removed</u> 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	TBD

The differential (Δ) between the targets and actual results for vessel removals over the last 16 years shows that all annual targets have been met or exceeded except for four years. 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 NISA and CWA compliance will continue to have significant budget and disposal rate implications for the foreseeable future. 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 the movement by tow of the non-retention merchant vessels. While California now allows in-water hull cleaning of SBRF obsolete vessels in San Francisco Bay waters with an approved discharge capture method, state regulators in Texas and Louisiana require all hull cleaning of SBRF vessels to be done in drydock out of concern that the in-water cleaning method presents a greater risk of marine species transfer compared to cleaning on drydock. Texas, Virginia, Hawaii and Pennsylvania allow scamping in their waters of NDRF and Navy NISMO vessels.

Additionally, Texas and Louisiana currently require vessels removed from the SBRF to not only be cleaned of marine growth in drydock, but that the vessels must not remain in the waters of San Francisco Bay longer than 14 days after cleaning and undocking in order for the ships to be allowed into their waters for recycling. The concern is that marine organisms invasive to Texas and Louisiana will re-attach to the ships' hulls if allowed to stay in San Francisco area waters beyond 14 days.

Compliance with the regulations and protective environmental measures has also impacted the removal rate of ships from the Agency's fleet sites and added significantly to ship disposal costs. To date, in-water marine growth mitigation costs have ranged from \$75-150 thousand per ship.

The requirement to drydock SBRF ships in California to clean underwater hulls of marine growth before removal has averaged approximately \$500K per ship, a significant increase over the cost of available in-water hull cleaning technologies. These additional costs applied to SBRF ships will continue to have a significant impact on future budget requests.

Under the Consent Decree, MARAD will clean, maintain and dispose of these ships in a manner that eliminates unpermitted sources of Bay pollution. MARAD began removing obsolete ships from Suisun Bay for recycling in November 2009 well ahead of the Consent Decree. All of the 57 obsolete non-retention ships located at the SBRF must be removed for disposal by September 30, 2017. As of the end of FY 2016, 55 of the 57 vessels covered by the Consent Decree have been removed from the SBRF for disposal -- two years ahead of the court ordered schedule. The Agency has met or exceeded all of the Consent Decree requirements related to the remediation of loose shipboard paint, vessel drydockings and vessel removals and the environmental Plaintiffs have witnessed the positive results first hand.

II 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 proscribed 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.⁷ Under the provisions of the National Historic Preservation Act (NHPA) of 1966, as amended, the highest standard of care for historic objects falls upon Federal owners of NHLs. Consequently, MARAD maintains an appropriate historic stewardship program for the NSS. With due care and thoughtful planning, MARAD is able to seamlessly integrate stewardship into our licensed activities, and avoid direct costs or similar burdens that might otherwise accrue if stewardship obligations were managed separately.

The NSS stewardship obligations are not the sole responsibility of MARAD. Decommissioning and license termination are future Federal undertakings in which the NRC has an equal obligation. The NRC license is the authority under which decommissioning will be performed, and under the provisions of the NHPA, that Federal license to require and permit the undertaking imposes planning and mitigation obligations on the issuing-agency that are effectively equal to those imposed on MARAD as the owner of an NHL. Also important to note is that decommissioning and license termination will not negate the ship’s NHL status, and is not intended to result in the immediate disposal of the ship itself. MARAD will retain some measure

⁷ 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.

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, layberthing location.

FY 2016 Significant Activities

Funding from the ship disposal account was constrained in FY 2016, and routine protective storage activities were carried out at an austere level. 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. As expected (and reported in 2015), MARAD was able to downgrade the controls imposed on three outlying radiologically controlled areas within the ship that were environmentally remediated in 2015. MARAD also conducted an asbestos survey throughout the occupied areas of the ship; remediated asbestos conditions discovered early in the year, and also completed a PCB remediation effort stemming from a failed lighting transformer that was discovered early in the year.

During FY 2016, MARAD solicited and awarded a follow-on layberthing contract. The incumbent contractor, Canton Marine Terminal, Inc., was awarded the contract with performance beginning on November 8, 2016. The contract has a nominal five-year term. The ship will remain at its present location.

MARAD distributed two tranches of stewardship (heritage) funds to the NSS during the FY 2016 period, although the first tranche was allocated against FY 2015. 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 will support additional public-access related projects for 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 September, 2016, 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.

The collapse of scrap steel prices since 2014, fueled by slowing worldwide demand for processed and finished steel products, has depressed the domestic ship recycling industry whereby recycling facilities are no longer able to purchase MARAD/Navy vessels for recycling. The current 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.

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	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Wheeler	MT	Dredge	Active								TBD
2	Essayons	MT	Dredge	Active								TBD
3	McFarland	MT	Dredge	Active								TBD
4	Hurley	MT	Dredge	Active								TBD
5	Yaquina	MT	Dredge	Active								TBD
6	Jadwin	MT	Dredge	Active								TBD
7	Potter	MT	Dredge	Active								TBD
8	Mississippi	MT	Towboat	Active								TBD
Legend		Disposition Summary			Planned Removal from Service Summary							
MT	Merchant Type Vessel		Retain	0		Avail for Disposal	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEK	0			FY 17	FY 18	FY 19	FY 20	FY 21	
Active	Vessels in use or in an operating/readiness status		Foreign Military Sales	0		0	0	0	0	0	0	
In-Active	Vessels laid-up (non-operating/non-retention status)		Scrap	0								
X	Foreign Military Sales		Donation	0								
X	SINKEK		TBD	0								
X	Scrap		Total In-Active	0								
X	Donation		Total Active	8								
X	Remove From Service		Total Number of Ships*	8	*This represents the total number of vessels greater than 1,500 gross tons owned by the USACE							

APPENDIX B

United States Department of the Army – List of Vessels

United States Department of the Army - ARMY												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	USAV General Frank S. Besson, Jr (LSV-1)	MT	Logistics Support Vessel	Active								2029
2	USAV CW3 Harold C. Clinger (LSV-2)	MT	Logistics Support Vessel	Active								2029
3	USAV General Brehon B. Somervell (LSV-3)	MT	Logistics Support Vessel	Active								2029
4	USAV Lt. General William B. Bunker (LSV-4)	MT	Logistics Support Vessel	Active								2029
5	USAV Major General Charles P. Gross (LSV-5)	MT	Logistics Support Vessel	Active								2029
6	USAV SP4 James A. Loux (LSV-6)	MT	Logistics Support Vessel	Active								2029
7	USAV SSGT Robert T. Kuroda (LSV-7)	MT	Logistics Support Vessel	Active								2027
8	USAV Major General Robert Smalls (LSV-8)	MT	Logistics Support Vessel	Active								2027
9	Keystone State 6801	MT	Barge Derrick	Active								2029
10	Saltillo 6802	MT	Barge Derrick	Active								2029
11	Springfield 6803	MT	Barge Derrick	Active								2030
12	Delaware 6804	MT	Barge Derrick	Active								2030
Legend		Disposition Summary			Planned Removal from Service Summary							
MT	Merchant Type Vessel		Retain	0	Avail for	Fiscal Year Removed from Service						
C	Combatant Vessel		SINKEX	0	Disposal	FY 17	FY 18	FY 19	FY 20	FY 21		
Active	Vessels in use or in an operating/readiness status		Foreign Military Sales	0	0	0	0	0	0	0		
In-Active	Vessels laid-up (non-operating/non-retention status)		Scrap	0								
X	Foreign Military Sales		Donation	0								
X	SINKEX		TBD	0								
X	Scrap		Total In-Active	0								
X	Donation		Total Active	12								
X	Remove From Service		Total Number of Ships*	12	* 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	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Tripoli	MT	Amphibious Assault Ship	In-Active	Scrap	X						2015
2	FB-62	MT	Barge Office	Active								TBD
3	Cape Farewell	MT	Barge Ship	Active								TBD
4	Cape Flattery	MT	Barge Ship	Active								TBD
5	Cape Fear	MT	Barge Ship	Active	Scrap			X				2018
6	Cape Florida	MT	Barge Ship	Active	Scrap		X					2017
7	Cape May	MT	Barge Ship	Active								TBD
8	Cape Mendocino	MT	Barge Ship	Active								TBD
9	Cape Mohican	MT	Barge Ship	Active								TBD
10	Curtiss	MT	Break Bulk	Active								TBD
11	Wright	MT	Break Bulk	Active								TBD
12	Cape Gibson	MT	Break Bulk	In-Active	Scrap	X						2015
13	Cape Girardeau	MT	Break Bulk	Active								TBD
14	Cape Johnson	MT	Break Bulk	In-Active	Scrap	X						2012
15	Cape Jacob	MT	Break Bulk	Active	Scrap			X				2018
16	Cape Juby	MT	Break Bulk	Active								TBD
17	Cape Nome	MT	Break Bulk	Active								TBD
18	Cape Archway	MT	Break Bulk	In-Active	Scrap	X						2009
19	Cape Avinof	MT	Break Bulk	Active								TBD
20	Cape Ann	MT	Break Bulk	Active								TBD
21	Cape Breton	MT	Break Bulk	In-Active	Scrap	X						2012
22	Cape Borda	MT	Break Bulk	In-Active	Scrap	X						2012
23	Cape Bover	MT	Break Bulk	Active								TBD
24	Del Monte	MT	Break Bulk	Active								TBD
25	Cape Chalmers	MT	Break Bulk	Active								TBD
26	Cape Alexander	MT	Break Bulk	In-Active	Scrap	X						2009
27	Cape Alava	MT	Break Bulk	In-Active	Scrap	X						2013
28	Gopher State	MT	Crane Ship	Active								TBD
29	Flickertail State	MT	Crane Ship	Active								TBD
30	Cornhusker State	MT	Crane Ship	Active								TBD
31	Keystone State	MT	Crane Ship	Active								TBD
32	Grand Canyon State	MT	Crane Ship	Active								TBD
33	Gem State	MT	Crane Ship	Active								TBD
34	Diamond State	MT	Crane Ship	Active								TBD
35	Equality State	MT	Crane Ship	In-Active	Scrap	X						2016
36	Green Mountain State	MT	Crane Ship	Active								TBD
37	Algol	MT	Roll-On/Roll-Off	Active								TBD
38	Bellatrix	MT	Roll-On/Roll-Off	Active								TBD
39	Capella	MT	Roll-On/Roll-Off	Active								TBD
40	Antares	MT	Roll-On/Roll-Off	Active								TBD
41	Denebola	MT	Roll-On/Roll-Off	Active								TBD
42	Regulus	MT	Roll-On/Roll-Off	Active								TBD
43	Altair	MT	Roll-On/Roll-Off	Active								TBD
44	Pacific Tracker	MT	Missile Instrumentation Ship	Active								TBD
45	Observation Island	MT	Missile Instrumentation Ship	In-Active	Scrap	X						2015

United States Maritime Administration - MARAD

No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
46	Pacific Collector	MT	Missile Instrumentation Ship	Active								TBD
47	NS Savannah	MT	Nuclear Ship	Active								TBD
48	Harkness	MT	Surveying Ship	Active	Scrap		X					2017
49	Cape Hudson	MT	Roll-On/Roll-Off	Active								TBD
50	Cape Horn	MT	Roll-On/Roll-Off	Active								TBD
51	Cape Henry	MT	Roll-On/Roll-Off	Active								TBD
52	Cape Inscription	MT	Roll-On/Roll-Off	Active								TBD
53	Cape Isabel	MT	Roll-On/Roll-Off	Active								TBD
54	Cape Island	MT	Roll-On/Roll-Off	Active								TBD
55	Cape Intrepid	MT	Roll-On/Roll-Off	Active								TBD
56	Admiral Callaghan	MT	Roll-On/Roll-Off	Active								TBD
57	Pollux	MT	Roll-On/Roll-Off	Active								TBD
58	Cape Washington	MT	Roll-On/Roll-Off	Active								TBD
59	Cape Wrath	MT	Roll-On/Roll-Off	Active								TBD
60	Cape Victory	MT	Roll-On/Roll-Off	Active								TBD
61	Cape Vincent	MT	Roll-On/Roll-Off	Active								TBD
62	Cape Texas	MT	Roll-On/Roll-Off	Active								TBD
63	Cape Taylor	MT	Roll-On/Roll-Off	Active								TBD
64	Cape Kennedy	MT	Roll-On/Roll-Off	Active								TBD
65	Cape Knox	MT	Roll-On/Roll-Off	Active								TBD
66	Cape Orlando	MT	Roll-On/Roll-Off	Active								TBD
67	Cape Lobos	MT	Roll-On/Roll-Off	In-Active	Scrap	X						2014
68	Cape Rise	MT	Roll-On/Roll-Off	Active								TBD
69	Cape Ray	MT	Roll-On/Roll-Off	Active								TBD
70	Cape Race	MT	Roll-On/Roll-Off	Active								TBD
71	Cape Diamond	MT	Roll-On/Roll-Off	Active								TBD
72	Cape Domingo	MT	Roll-On/Roll-Off	Active								TBD
73	Cape Decision	MT	Roll-On/Roll-Off	Active								TBD
74	Cape Douglas	MT	Roll-On/Roll-Off	Active								TBD
75	Cape Ducato	MT	Roll-On/Roll-Off	Active								TBD
76	Cape Edmont	MT	Roll-On/Roll-Off	Active								TBD
77	Cape Trinity	MT	Roll-On/Roll-Off	Active								TBD
78	Simon Lake	MT	Submarine Tender	In-Active	Scrap	X						2006
79	Triumph	MT	Surveillance Ship	Active								TBD
80	Summer	MT	Surveying Ship	In-Active	Scrap	X						2014
81	Petersburg	MT	Tanker	Active								TBD
82	Chesapeake	MT	Tanker	Active	Scrap			X				2018
83	Samuel L Cobb	MT	Tanker	Active	Scrap			X				2018
84	Paul Buck	MT	Tanker	Active	Scrap			X				2018
85	Richard G Matthiesen	MT	Tanker	Active								TBD
86	Kennedy	MT	Training Ship	Active								TBD
87	Empire State	MT	Training Ship	Active								TBD
88	State Of Maine	MT	Training Ship	Active								TBD
89	Golden Bear	MT	Training Ship	Active								TBD
90	State Of Michigan	MT	Training Ship	Active								TBD
91	General Rudder	MT	Training Ship	Active								TBD
Legend		Disposition Summary				Planned Removal from Service Summary						
MT	Merchant Type Vessel	Retain	0	Avail for	Fiscal Year Removed from Service							
C	Combatant Vessel	SINKEX	0	Disposal	FY 17	FY 18	FY 19	FY 20	FY 21			
Active	Vessels in use or in an operating/readiness status	Foreign Military Sales	0	13	2	5	0	0	0			
In-Active	Vessels laid-up (non-operating/non-retention status)	Scrap	20									
X	Foreign Military Sales	Donation	0									
X	SINKEX	TBD	0									
X	Scrap	Total In-Active	13									
X	Donation	Total Active	78									
X	Remove From Service	Total Number of Ships*	91									

* 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	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	USS Enterprise (CVN -65)	C	Aircraft Carrier	Active	Retain		X					2017
2	USS America (LHA-6)	MT	Amphibious Assault Ship	Active								TBD
3	USS Makin Island (LHD-8)	MT	Amphibious Assault Ship	Active								TBD
4	USS WASP (LHD 1)	MT	Amphibious Assault Ship	Active								TBD
5	USS Essex (LHD-2)	MT	Amphibious Assault Ship	Active								TBD
6	USS Kearsarge (LHD-3)	MT	Amphibious Assault Ship	Active								TBD
7	USS Boxer (LHD-4)	MT	Amphibious Assault Ship	Active								TBD
8	USS Bataan (LHD-5)	MT	Amphibious Assault Ship	Active								TBD
9	USS Bonhomme Richard (LHD-6)	MT	Amphibious Assault Ship	Active								TBD
10	USS Iwo Jima (LHD-7)	MT	Amphibious Assault Ship	Active								TBD
11	USS Blue Ridge (LCC-19)	MT	Amphibious Command Ship	Active								TBD
12	USS Mount Whitney (LCC-20)	MT	Amphibious Command Ship	Active								TBD
13	USS San Antonio (LPD-17)	MT	Amphibious Transport Dock	Active								TBD
14	USS New Orleans (LPD-18)	MT	Amphibious Transport Dock	Active								TBD
15	USS Mesa Verde (LPD-19)	MT	Amphibious Transport Dock	Active								TBD
16	USS John P. Murtha (LPD-26)	MT	Amphibious Transport Dock	Active								TBD
17	USS Somerset (LPD-25)	MT	Amphibious Transport Dock	Active								TBD
18	USS Arlington (LPD-24)	MT	Amphibious Transport Dock	Active								TBD
19	USS Anchorage (LPD-23)	MT	Amphibious Transport Dock	Active								TBD
20	USS San Diego (LPD-22)	MT	Amphibious Transport Dock	Active								TBD
21	USS New York (LPD-21)	MT	Amphibious Transport Dock	Active								TBD
22	USS Green Bay (LPD-20)	MT	Amphibious Transport Dock	Active								TBD
23	USS Rushmore (LSD-47)	MT	Dock Landing Ship	Active								TBD
24	USS Ashland (LSD-48)	MT	Dock Landing Ship	Active								TBD
25	USS Tortuga (LSD-46)	MT	Dock Landing Ship	Active								TBD
26	USS Comstock (LSD-45)	MT	Dock Landing Ship	Active								TBD
27	USS Gunston Hall (LSD-44)	MT	Dock Landing Ship	Active								TBD
28	USS Fort McHenry (LSD-43)	MT	Dock Landing Ship	Active								TBD
29	USS Germantown (LSD-42)	MT	Dock Landing Ship	Active								TBD
30	USS Whidbey Island (LSD-41)	MT	Dock Landing Ship	Active								TBD
31	USS Chancellorsville (CG 62)	C	Guided Missile Cruiser	Active								TBD
32	USS Bunker Hill (CG 52)	C	Guided Missile Cruiser	Active	Retain					X		2020
33	USS Mobile Bay (CG 53)	C	Guided Missile Cruiser	Active	Retain					X		2020
34	USS Antietam (CG 54)	C	Guided Missile Cruiser	Active								2022
35	USS Leyte Gulf (CG 55)	C	Guided Missile Cruiser	Active								2022
36	USS San Jacinto (CG 56)	C	Guided Missile Cruiser	Active								TBD
37	USS Lake Champlain (CG 57)	C	Guided Missile Cruiser	Active								TBD
38	USS Philippine Sea (CG 58)	C	Guided Missile Cruiser	Active								TBD
39	USS Princeton (CG 59)	C	Guided Missile Cruiser	Active								TBD
40	USS Monterey (CG 61)	C	Guided Missile Cruiser	Active								TBD
41	USS Cowpens (CG 63)	C	Guided Missile Cruiser	Active								TBD
42	USS Gettysburg (CG 64)	C	Guided Missile Cruiser	Active								TBD
43	USS Chosin (CG 65)	C	Guided Missile Cruiser	Active								TBD
44	USS Hue City (CG 66)	C	Guided Missile Cruiser	Active								TBD
45	USS Shiloh (CG 67)	C	Guided Missile Cruiser	Active								TBD

United States Department of the Navy
Navy Active Ships - NAVSEA

No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
46	USS Anzio (CG 68)	C	Guided Missile Cruiser	Active								TBD
47	USS Vicksburg (CG 69)	C	Guided Missile Cruiser	Active								TBD
48	USS Lake Erie (CG 70)	C	Guided Missile Cruiser	Active								TBD
49	USS Cape St. George (CG 71)	C	Guided Missile Cruiser	Active								TBD
50	USS Vella Gulf (CG 72)	C	Guided Missile Cruiser	Active								TBD
51	USS Port Royal (CG 73)	C	Guided Missile Cruiser	Active								TBD
52	USS Normandy (CG 60)	C	Guided Missile Cruiser	Active								TBD
53	USS Howard (DDG-83)	C	Guided Missile Destroyer	Active								TBD
54	USS Winston S. Churchill (DDG-81)	C	Guided Missile Destroyer	Active								TBD
55	USS Bulkeley (DDG-84)	C	Guided Missile Destroyer	Active								TBD
56	USS Lassen (DDG-82)	C	Guided Missile Destroyer	Active								TBD
57	USS Farragut (DDG-99)	C	Guided Missile Destroyer	Active								TBD
58	USS McCampbell (DDG-85)	C	Guided Missile Destroyer	Active								TBD
59	USS Shoup (DDG-86)	C	Guided Missile Destroyer	Active								TBD
60	USS Mason (DDG-87)	C	Guided Missile Destroyer	Active								TBD
61	USS Preble (DDG-88)	C	Guided Missile Destroyer	Active								TBD
62	USS Mustin (DDG-89)	C	Guided Missile Destroyer	Active								TBD
63	USS Chafee (DDG-90)	C	Guided Missile Destroyer	Active								TBD
64	USS Pinckney (DDG-91)	C	Guided Missile Destroyer	Active								TBD
65	USS Momsen (DDG-92)	C	Guided Missile Destroyer	Active								TBD
66	USS Chung-Hoon (DDG-93)	C	Guided Missile Destroyer	Active								TBD
67	USS Nitze (DDG-94)	C	Guided Missile Destroyer	Active								TBD
68	USS James E. Williams (DDG-95)	C	Guided Missile Destroyer	Active								TBD
69	USS Bainbridge (DDG-96)	C	Guided Missile Destroyer	Active								TBD
70	USS Forrest Sherman (DDG-98)	C	Guided Missile Destroyer	Active								TBD
71	USS Kidd (DDG-100)	C	Guided Missile Destroyer	Active								TBD
72	USS Gridley (DDG-101)	C	Guided Missile Destroyer	Active								TBD
73	USS Sampson (DDG-102)	C	Guided Missile Destroyer	Active								TBD
74	USS Truxtun (DDG-103)	C	Guided Missile Destroyer	Active								TBD
75	USS Sterett (DDG-104)	C	Guided Missile Destroyer	Active								TBD
76	USS Dewey (DDG-105)	C	Guided Missile Destroyer	Active								TBD
77	USS Stockdale (DDG-106)	C	Guided Missile Destroyer	Active								TBD
78	USS Gravely (DDG-107)	C	Guided Missile Destroyer	Active								TBD
79	USS Wayne E. Meyer (DDG-108)	C	Guided Missile Destroyer	Active								TBD
80	USS Jason Dunham (DDG-109)	C	Guided Missile Destroyer	Active								TBD
81	USS William P. Lawrence (DDG-110)	C	Guided Missile Destroyer	Active								TBD
82	USS Spruance (DDG-111)	C	Guided Missile Destroyer	Active								TBD
83	USS Michael Murphy (DDG-112)	C	Guided Missile Destroyer	Active								TBD
84	USS Halsey (DDG-97)	C	Guided Missile Destroyer	Active								TBD
85	USS Oscar Austin (DDG-79)	C	Guided Missile Destroyer	Active								TBD
86	USS Roosevelt (DDG-80)	C	Guided Missile Destroyer	Active								TBD
87	USS Milius (DDG-69)	C	Guided Missile Destroyer	Active								TBD
88	USS John S. McCain (DDG-56)	C	Guided Missile Destroyer	Active								TBD
89	USS Mitscher (DDG-57)	C	Guided Missile Destroyer	Active								TBD
90	USS Laboon (DDG-58)	C	Guided Missile Destroyer	Active								TBD

United States Navy - Active												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
91	USS Russell (DDG-59)	C	Guided Missile Destroyer	Active								TBD
92	USS Paul Hamilton (DDG-60)	C	Guided Missile Destroyer	Active								TBD
93	USS Fitzgerald (DDG-62)	C	Guided Missile Destroyer	Active								TBD
94	USS Stethem (DDG-63)	C	Guided Missile Destroyer	Active								TBD
95	USS Carney (DDG-64)	C	Guided Missile Destroyer	Active								TBD
96	USS Benfold (DDG-65)	C	Guided Missile Destroyer	Active								TBD
97	USS Gonzalez (DDG-66)	C	Guided Missile Destroyer	Active								TBD
98	USS Curtis Wilbur (DDG-54)	C	Guided Missile Destroyer	Active								TBD
99	USS The Sullivans (DDG-68)	C	Guided Missile Destroyer	Active								TBD
100	USS John Paul Jones (DDG-53)	C	Guided Missile Destroyer	Active								TBD
101	USS Hopper (DDG-70)	C	Guided Missile Destroyer	Active								TBD
102	USS Ross (DDG-71)	C	Guided Missile Destroyer	Active								TBD
103	USS Mahan (DDG-72)	C	Guided Missile Destroyer	Active								TBD
104	USS Decatur (DDG-73)	C	Guided Missile Destroyer	Active								TBD
105	USS McFaul (DDG-74)	C	Guided Missile Destroyer	Active								TBD
106	USS Donald Cook (DDG-75)	C	Guided Missile Destroyer	Active								TBD
107	USS Higgins (DDG-76)	C	Guided Missile Destroyer	Active								TBD
108	USS O'Kane (DDG-77)	C	Guided Missile Destroyer	Active								TBD
109	USS Porter (DDG-78)	C	Guided Missile Destroyer	Active								TBD
110	USS Cole (DDG-67)	C	Guided Missile Destroyer	Active								TBD
111	USS Stout (DDG-55)	C	Guided Missile Destroyer	Active								TBD
112	USS Arleigh Burke (DDG-51)	C	Guided Missile Destroyer	Active								TBD
113	USS Ramage (DDG-61)	C	Guided Missile Destroyer	Active								TBD
114	USS Barry (DDG-52)	C	Guided Missile Destroyer	Active								TBD
115	USS Zumwalt (DDG 1000)	C	Guided Missile Destroyer	Active								TBD
116	USS Carter Hall (LSD-50)	MT	Landing Ship Dock	Active								TBD
117	USS Harpers Ferry (LSD-49)	MT	Landing Ship Dock	Active								TBD
118	USS Pearl Harbor (LSD-52)	MT	Landing Ship Dock	Active								TBD
119	USS Oak Hill (LSD-51)	MT	Landing Ship Dock	Active								TBD
120	USS Milwaukee (LCS-5)	C	Littoral Combat Ship	Active								TBD
121	USS Fort Worth (LCS-3)	C	Littoral Combat Ship	Active								TBD
122	USS Freedom (LCS-1)	C	Littoral Combat Ship	Active								TBD
123	USS Jackson (LCS-6)	C	Littoral Combat Ship	Active								TBD
124	USS Coronado (LCS-4)	C	Littoral Combat Ship	Active								TBD
125	USS Detroit (LCS 7)	C	Littoral Combat Ship	Active								TBD
126	USS Montgomery (LCS 8)	C	Littoral Combat Ship	Active								TBD
127	USS Independence (LCS-2)	C	Littoral Combat Ship	Active								TBD
Legend			Disposition Summary			Planned Removal from Service Summary						
MT	Merchant Type Vessel		Retain	3	Avail for	Fiscal Year Removed from Service						
C	Combatant Vessel		SINKEX	0	Disposal	FY 17	FY 18	FY 19	FY 20	FY 21		
Active	Vessels in use or in an operating/readiness status		Foreign Military Sales	0	0	1	0	0	2	0		
In-Active	Vessels laid-up (non-operating/non-retention status)		Scrap	0								
X	Foreign Military Sales		Donation	0								
X	SINKEX		TBD	0								
X	Scrap		Total In-Active	0								
X	Donation		Total Active	127								
X	Remove From Service		Total Number of Ships*	127	* 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 & In-Active Vessels												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	USS Ponce (AFSB-15)	MT	Afloat Forward Staging Base	Active	Scrap			X				2018
2	USNS Lewis and Clark (T-AKE 1)	MT	Ammo/Dry Cargo	Active								TBD
3	USNS Sacagawea (T-AKE 2)	MT	Ammo/Dry Cargo	Active								TBD
4	USNS Alan Shepard (T-AKE 3)	MT	Ammo/Dry Cargo	Active								TBD
5	USNS Richard E. Byrd (T-AKE 4)	MT	Ammo/Dry Cargo	Active								TBD
6	USNS Robert E. Peary (T-AKE 5)	MT	Ammo/Dry Cargo	Active								TBD
7	USNS Amelia Earhart (T-AKE 6)	MT	Ammo/Dry Cargo	Active								TBD
8	USNS Carl Brashear (T-AKE 7)	MT	Ammo/Dry Cargo	Active								TBD
9	USNS Wally Schirra (T-AKE 8)	MT	Ammo/Dry Cargo	Active								TBD
10	USNS Matthew Perry (T-AKE 9)	MT	Ammo/Dry Cargo	Active								TBD
11	USNS Charles Drew (T-AKE 10)	MT	Ammo/Dry Cargo	Active								TBD
12	USNS Washington Chambers (T-AKE 11)	MT	Ammo/Dry Cargo	Active								TBD
13	USNS William McLean (T-AKE 12)	MT	Ammo/Dry Cargo	Active								TBD
14	USNS Medgar Evers (T-AKE 13)	MT	Ammo/Dry Cargo	Active								TBD
15	USNS Cesar Chavez (T-AKE 14)	MT	Ammo/Dry Cargo	Active								TBD
16	USNS Zeus (T-ARC 7)	MT	Cable Laying/Repair	Active								2033
17	USS Mount Whitney (LCC 20)	MT	Command Ship	Active								2039
18	USNS SGT Matej Kocak (T-AK 3005)	MT	Container Roll-On/Roll-Off	Active								TBD
19	USNS PFC Eugene A. Obregon (T-AK 3006)	MT	Container Roll-On/Roll-Off	Active								TBD
20	USNS MAJ Stephen W. Pless (T-AK 3007)	MT	Container Roll-On/Roll-Off	Active								TBD
21	USNS 1st LT Harry L. Martin (T-AK 3015)	MT	Container Roll-On/Roll-Off	Active								TBD
22	USNS LCPL Roy M. Wheat (T-AK 3016)	MT	Container Roll-On/Roll-Off	Active								TBD
23	USNS Supply (T-AOE 6)	MT	Fast Combat Support Ship	Active								TBD
24	USNS Rainier (T-AOE 7)	MT	Fast Combat Support Ship	In-Active	Retain							2016
25	USNS Arctic (T-AOE 8)	MT	Fast Combat Support Ship	Active								TBD
26	USNS Bridge (T-AOE-10)	MT	Fast Combat Support Ship	In-Active	Retain							2014
27	USNS Mercy (T-AH 19)	MT	Hospital Ship	Active								TBD
28	USNS Comfort (T-AH 20)	MT	Hospital Ship	Active	TBD					X		2021
29	USNS Guam (HST 1)	MT	High Speed Transport	Active								TBD
30	USNS Puerto Rico (HST 2)	MT	High Speed Transport	Active								TBD
31	USNS Spearhead (JHSV 1)	MT	Expeditionary Fast Transport	Active								TBD
32	USNS Fall River (JHSV 4)	MT	Expeditionary Fast Transport	Active								TBD
33	USNS Millinocket (JHSV 3)	MT	Expeditionary Fast Transport	Active								TBD
34	USNS Choctaw County (JHSV 2)	MT	Expeditionary Fast Transport	Active								TBD
35	USNS Watson (T-AKR 310)	MT	Medium Roll-On/Roll-Off	Active								TBD
36	USNS Gordon (T-AKR 296)	MT	Medium Roll-On/Roll-Off	Active								TBD
37	USNS Shughart (T-AKR 295)	MT	Medium Roll-On/Roll-Off	Active								TBD
38	USNS Soderman (T-AKR 317)	MT	Medium Roll-On/Roll-Off	Active								TBD
39	USNS Pomeroy (T-AKR 316)	MT	Medium Roll-On/Roll-Off	Active								TBD
40	USNS Watkins (T-AKR 315)	MT	Medium Roll-On/Roll-Off	Active								TBD
41	USNS Gilliland (T-AKR 298)	MT	Medium Roll-On/Roll-Off	Active								TBD
42	USNS Red Cloud (T-AKR 313)	MT	Medium Roll-On/Roll-Off	Active								TBD
43	USNS Bob Hope (T-AKR 300)	MT	Medium Roll-On/Roll-Off	Active								TBD
44	USNS Charlton (T-AKR 314)	MT	Medium Roll-On/Roll-Off	Active								TBD
45	USNS Yano (T-AKR 297)	MT	Medium Roll-On/Roll-Off	Active								TBD

United States Department of the Navy
Military Sealift Command Active & In-Active Vessels

No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
46	USNS Benavidez (T-AKR 306)	MT	Medium Roll-On/Roll-Off	Active								TBD
47	USNS Brittin (T-AKR 305)	MT	Medium Roll-On/Roll-Off	Active								TBD
48	USNS Mendonca (T-AKR 303)	MT	Medium Roll-On/Roll-Off	Active								TBD
49	USNS Fisher (T-AKR 301)	MT	Medium Roll-On/Roll-Off	Active								TBD
50	USNS Howard O. Lorenzen (T-AGM 25)	MT	Missile Range Instrumentation Ship	Active								TBD
51	USNS Invincible (T-AGM 24)	MT	Missile Range Instrumentation Ship	Active								TBD
52	USNS John Glenn (MLP 2)	MT	Mobile Landing Platforms	Active								TBD
53	USNS Montford Point (MLP 1)	MT	Mobile Landing Platforms	Active								TBD
54	USNS Waters (T-AGS 45)	MT	Navigation Test Support Ship	Active								TBD
55	USNS Impeccable (T-AGOS 23)	MT	Ocean Surveillance	Active								TBD
56	USNS Able (T-AGOS 20)	MT	Ocean Surveillance	Active								TBD
57	USNS Loyal (T-AGOS 22)	MT	Ocean Surveillance	Active								TBD
58	USNS Victorious (T-AGOS 19)	MT	Ocean Surveillance	Active								TBD
59	USNS Effective (T-AGOS 21)	MT	Ocean Surveillance	Active								TBD
60	USNS Sioux (T-ATF 171)	MT	Fleet Ocean Tug	Active	Scrap						X	2021
61	USNS Apache (T-ATF 172)	MT	Fleet Ocean Tug	Active	Scrap						X	2021
62	USNS Catawba (T-ATF 168)	MT	Fleet Ocean Tug	Active	Retain				X			2019
63	USNS Navajo (T-ATF 169)	MT	Fleet Ocean Tug	In-Active	Scrap		X					2017
64	USNS Mary Sears (T-AGS 65)	MT	Oceangraphic Survey	Active								TBD
65	USNS Bruce C. Heezen (T-AGS 64)	MT	Oceangraphic Survey	Active								TBD
66	USNS Henson (T-AGS 63)	MT	Oceangraphic Survey	Active								TBD
67	USNS Bowditch (T-AGS 62)	MT	Oceangraphic Survey	Active								TBD
68	USNS Pathfinder (T-AGS 60)	MT	Oceangraphic Survey	Active								TBD
69	USNS John Lenthall (T-AO 189)	MT	Fleet Oiler	Active	Scrap						X	2021
70	USNS Walter S. Diehl (T-AO 193)	MT	Fleet Oiler	Active	Retain				X			2020
71	USNS John Ericsson (T-AO 194)	MT	Fleet Oiler	Active								TBD
72	USNS Joshua Humphreys (T-AO 188)	MT	Fleet Oiler	Active								TBD
73	USNS Henry J. Kaiser (T-AO 187)	MT	Fleet Oiler	Active								TBD
74	USNS Pecos (T-AO 197)	MT	Fleet Oiler	Active								TBD
75	USNS Laramie (T-AO 203)	MT	Fleet Oiler	Active								TBD
76	USNS Leroy Grumman (T-AO 195)	MT	Fleet Oiler	Active								2022
77	USNS Rappahannock (T-AO 204)	MT	Fleet Oiler	Active								TBD
78	USNS Kanawha (T-AO 196)	MT	Fleet Oiler	Active								TBD
79	USNS Yukon (T-AO 202)	MT	Fleet Oiler	Active								TBD
80	USNS Patuxent (T-AO 201)	MT	Fleet Oiler	Active								TBD
81	USNS Guadalupe (T-AO 200)	MT	Fleet Oiler	Active								TBD
82	USNS Tippecanoe (T-AO 199)	MT	Fleet Oiler	Active								TBD
83	USNS Big Horn (T-AO 198)	MT	Fleet Oiler	Active								TBD
84	USNS Vadm K. R. Wheeler (T-AG 5001)	MT	Offshore Petroleum Discharge Ship	Active								TBD
85	USNS Grapple (T-ARS 53)	MT	Rescue/Salvage	Active	Retain		X					2017
86	USNS Salvor (T-ARS 52)	MT	Rescue/Salvage	Active								TBD
87	USNS Safeguard (T-ARS 50)	MT	Rescue/Salvage	Active	Retain		X					2017
88	USNS Grasp (T-ARS 51)	MT	Rescue/Salvage	Active								TBD
89	USNS Seay (T-AKR 302)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
90	USNS SGT William R. Button (T-AK 3012)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD

United States Department of the Navy												
Military Sealift Command Active & In-Active Vessels												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
91	USNS 1st LT Jack Lummus (T-AK 3011)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
92	USNS 1st LT Baldomero Lopez (T-AK 3010)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
93	USNS PFC Dewayne T. Williams (T-AK 3009)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
94	USNS 2ND LT John P. Bobo (T-AK 3008)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
95	USNS GYSGT Fred W. Stockham (T-AK 3017)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
96	USNS Dahl (T-AKR 312)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
97	USNS Piilaa (T-AKR 304)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
98	USNS Sisler (T-AKR 311)	MT	Large, Medium-Speed Roll-on/Roll-off	Active								TBD
99	Sea-Based X-Band Radar	MT	Semi-Submersible	Active								TBD
100	USS Frank Cable (AS 40)	MT	Sub Tenders	Active								TBD
101	USS Emory S. Land (AS 39)	MT	Sub Tenders	Active								TBD
102	USNS Lewis B Puller (MLP/AFSB 3)	MT	Expeditionary Sea Base	Active								TBD
103	USNS Maury (T-AGS-66)	MT	Surveying Ship	Active								TBD
104	USNS Trenton (T-EPF 5)	MT	Expeditionary Fast Transport	Active								TBD
105	USNS Carson City (T-EPF 7)	MT	Expeditionary Fast Transport	Active								TBD
106	USNS Brunswick (T-EPF 6)	MT	Expeditionary Fast Transport	Active								TBD
107	USNS Lawrence H. Gianella (T-AOT 1125)	MT	Tanker	Active	TBD		X					2018
Legend		Disposition Summary			Planned Removal from Service Summary							
MT	Merchant Type Vessel	Retain	6	Avail for	Fiscal Year Removed from Service							
C	Combatant Vessel	SINKEX	0	Disposal	FY 17	FY 18	FY 19	FY 20	FY 21			
Active	Vessels in use or in an operating/readiness status	Foreign Military Sales	0	0	3	2	1	1	4			
In-Active	Vessels laid-up (non-operating/non-retention status)	Scrap	5									
X	Foreign Military Sales	Donation	0									
X	SINKEX	TBD	2									
X	Scrap	Total In-Active	3									
X	Donation	Total Active	104	* This represents the total number of vessels greater than 1,500 gross tons operated by MSC.								
X	Remove From Service	Total Number of Ships*	107	The In-Active Ships Office (SEA 211) disposes of MSC vessels.								

APPENDIX F

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

United States Department of the Navy Navy In-Active Ships Office - (SEA 21I)												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Ex-USS Kitty Hawk (CV-63)	C	Aircraft Carrier	In-Active	Retain							TBD
2	Ex-John F. Kennedy (CV-67)	C	Aircraft Carrier	In-Active	Donation	X						2007
3	Ex-Independence (CV62)	C	Aircraft Carrier	In-Active	Scrap	X						1998
4	Ex-Peleliu (LHA-5)	MT	Amphibious Assault Ship	In-Active	Retain							2015
5	Ex-Tarawa (LHA-1)	MT	Amphibious Assault Ship	In-Active	Retain							2009
6	Ex-Nassau (LHA-4)	MT	Amphibious Assault Ship	In-Active	Retain							2011
7	Ex-Charleston (LKA-113)	MT	Amphibious Cargo Ship	In-Active	Scrap	X						2015
8	Ex-Durham (LKA-114)	MT	Amphibious Cargo Ship	In-Active	SINKEX	X						1994
9	Ex-St. Louis (LKA-116)	MT	Amphibious Cargo Ship	In-Active	SINKEX	X						1992
10	Ex-El Paso (LKA-117)	MT	Amphibious Cargo Ship	In-Active	Scrap	X						1994
11	Ex-Mobile (LKA-115)	MT	Amphibious Cargo Ship	In-Active	Scrap	X						1994
12	Ex-Shreveport (LPD-12)	MT	Amphibious Transport Dock	In-Active	Scrap	X						2007
13	Ex-Dubuque (LPD-8)	MT	Amphibious Transport Dock	In-Active	Retain							2011
14	Ex-Denver (LPD-9)	MT	Amphibious Transport Dock	In-Active	Retain							2014
15	Ex-Nashville (LPD-13)	MT	Amphibious Transport Dock	In-Active	Retain							2009
16	Ex-Juneau (LPD-10)	MT	Amphibious Transport Dock	In-Active	Retain							2008
17	Ex-Cleveland (LPD-7)	MT	Amphibious Transport Dock	In-Active	Retain							2011
18	Ex-Charles F. Adams (DDG-2)	C	Destroyer	In-Active	Donation	X						1990
19	Ex-Barry (DD-933)	C	Destroyer	In-Active	Scrap	X						1982
20	Ex-Thomas S Gates (CG-51)	C	Guided Missile Destroyer	In-Active	Scrap	X						2005
21	Ex-Ticonderoga (CG-47)	C	Guided Missile Destroyer	In-Active	Scrap	X						2004
22	Ex-Yorktown (CG-48)	C	Guided Missile Destroyer	In-Active	Scrap	X						2004
23	Ex-Vandegrift (FFG-48)	C	Guided Missile Frigate	In-Active	FMS	X						2015
24	Ex-Elrod (FFG-55)	C	Guided Missile Frigate	In-Active	FMS	X						2015
25	Ex-Simpson (FFG-56)	C	Guided Missile Frigate	In-Active	FMS	X						2015
26	Ex-Kaufman (FFG-59)	C	Guided Missile Frigate	In-Active	FMS	X						2015
27	Ex-Rodney M. Davis (FFG-60)	C	Guided Missile Frigate	In-Active	FMS	X						2015
28	Ex-McClusky (FFG-41)	C	Guided Missile Frigate	In-Active	SINKEX	X						2015
29	Ex-Ingraham (FFG-61)	C	Guided Missile Frigate	In-Active	SINKEX	X						2015
30	Ex-De Wert (FFG-45)	C	Guided Missile Frigate	In-Active	FMS	X						2014
31	Ex-Robert G. Bradley (FFG-49)	C	Guided Missile Frigate	In-Active	FMS	X						2014
32	Ex-Halyburton (FFG-40)	C	Guided Missile Frigate	In-Active	FMS	X						2014
33	Ex-Ford (FFG-54)	C	Guided Missile Frigate	In-Active	SINKEX	X						2013
34	Ex-Klakring (FFG-42)	C	Guided Missile Frigate	In-Active	FMS	X						2013
35	Ex-Carr (FFG-52)	C	Guided Missile Frigate	In-Active	FMS	X						2013
36	Ex-Curtis (FFG-38)	C	Guided Missile Frigate	In-Active	SINKEX	X						2013
37	Ex-Samuel B Roberts (FFG-58)	C	Guided Missile Frigate	In-Active	Scrap	X						2015
38	Ex-Nicholas (FFG-47)	C	Guided Missile Frigate	In-Active	Scrap	X						2014
39	Ex-Underwood (FFG-36)	C	Guided Missile Frigate	In-Active	Scrap	X						2013
40	Ex-John L. Hall (FFG-32)	C	Guided Missile Frigate	In-Active	Scrap	X						2012
41	Ex-Boone (FFG-28)	C	Guided Missile Frigate	In-Active	Scrap	X						2012
42	Ex-Stephen W Groves (FFG-29)	C	Guided Missile Frigate	In-Active	Scrap	X						2012
43	Ex-Doyle (FFG-39)	C	Guided Missile Frigate	In-Active	Scrap	X						2011
44	Ex-Hawes (FFG-53)	C	Guided Missile Frigate	In-Active	Scrap	X						2010
45	Ex-Mohawk (T-ATF-170)	MT	Fleet Ocean Tug	In-Active	FMS	X						2015
46	Ex-Hayes (T-AGOR-16)	MT	Oceanographic Research Ship	In-Active	Scrap	X						2008
47	Ex-Boulder (LST-1190)	MT	Tank Landing Ship	In-Active	Scrap	X						1994
48	Ex-Racine (LST-1191)	MT	Tank Landing Ship	In-Active	SINKEX	X						1993
In-Active Ships being Utilized by Other Organizations												
1	Ex-Paul F. Foster (DD-964)	C	Destroyer	Active	Retain							2003
2	Ex-Cassin Young (DD-793)	C	Destroyer	Active	Retain							1960
3	Ex-Shadwell (LSD-15)	MT	Dock Landing Ship	Active	Retain							1970
4	Ex-Narragansett (T-ATF-167)	MT	Fleet Ocean Tug	Active	Retain							1999
5	Ex-McKee (AS-41)	MT	Submarine Tender	Active	Retain							1999
Legend												
MT	Merchant Type Vessel											
C	Combatant Vessel											
Active	Vessels in use or in an operating/readiness status											
In-Active	Vessels laid-up (non-operating/non-retention status)											
X	Foreign Military Sales											
X	SINKEX											
X	Scrap											
X	Donation											
X	Remove From Service											
Disposition Summary												
				Retain	14							
				SINKEX	7							
				Foreign Military Sales	11							
				Scrap	19							
				Donation	2							
				TBD	0							
				Total In-Active	48							
				Total Active	5							
				Total Number of Ships*	53							
Planned Removal from Service Summary												
		Avail for		Fiscal Year Removed from Service								
		Disposal		FY 17	FY 18	FY 19	FY 20	FY 21				
		39		0	0	0	0	0				

* 5 ships managed by Sea 21I are on loan to other DOD organizations.
53 represents the total number of vessels greater than 1,500 gross tons controlled for disposal by SEA 21I

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	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	RV Sally Ride	MT	Research Vessel	Active								2046
2	RV Neil Armstrong	MT	Research Vessel	Active								2045
3	RV Atlantis	MT	Research Vessel	Active								2042
4	RV Roger Revelle	MT	Research Vessel	Active								2041
5	RV Thomas G Thompson	MT	Research Vessel	Active								2036
6	RV Kilo Moana	MT	Research Vessel	Active								2032
Legend			Disposition Summary			Planned Removal from Service Summary						
MT	Merchant Type Vessel		Retain	0		Avail for	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEX	0		Disposal	FY 17	FY 18	FY 19	FY 20	FY 21	
Active	Vessels in use or in an operating/readiness status		Foreign Military Sales	0		0	0	0	0	0	0	
In-Active	Vessels laid-up (non-operating/non-retention status)		Scrap	0								
X	Foreign Military Sales		Donation	0								
X	SINKEX		TBD	0								
X	Scrap		Total In-Active	0								
X	Donation		Total Active	6								
X	Remove From Service		Total Number of Ships*	6		* 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	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Rainier	MT	Research Vessel	Active								2028
2	Fairweather	MT	Research Vessel	Active								2025
3	Thomas Jefferson	MT	Research Vessel	Active								2028
4	Gordon Gunter	MT	Research Vessel	Active								2025
5	Okeanos Explorer	MT	Research Vessel	Active								2025
6	Oscar Elton Sette	MT	Research Vessel	Active								2023
7	Hi'ialakai	MT	Research Vessel	Active								2025
8	Reuben Lasker	MT	Research Vessel	Active								TBD
9	Pisces	MT	Research Vessel	Active								TBD
10	Oscar Dyson	MT	Research Vessel	Active								TBD
11	Henry B. Bigelow	MT	Research Vessel	Active								TBD
12	Bell M. Shimada	MT	Research Vessel	Active								TBD
13	Ronald Brown	MT	Research Vessel	Active								TBD
Legend		Disposition Summary			Planned Removal from Service Summary							
MT	Merchant Type Vessel		Retain	0	Avail for		Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEX	0	Disposal	FY 17	FY 18	FY 19	FY 20	FY 21	0	0
Active	Vessels in use or in an operating/readiness status		Foreign Military Sales	0								
In-Active	Vessels laid-up (non-operating/non-retention status)		Scrap	0								
X	Foreign Military Sales		Donation	0								
X	SINKEX		TBD	0								
X	Scrap		Total In-Active	0								
X	Donation		Total Active	13								
X	Remove From Service		Total Number of Ships*	13	* This represents the total number of vessels greater than 1,500 gross tons owned by NOAA							

APPENDIX I

National Science Foundation – List of Vessels

National Science Foundation - NSF												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	RV Sikuloaq	MT	Research Vessel	Active								2044
2	RV Marcus Langseth	MT	Research Vessel	Active								2030
Legend			Disposition Summary			Planned Removal from Service Summary						
MT	Merchant Type Vessel		Retain	0		Avail for	Fiscal Year Removed from Service					
C	Combatant Vessel		SINKEX	0		Disposal	FY 17	FY 18	FY 19	FY 20	FY 21	
Active	Vessels in use or in an operating/readiness status		Foreign Military Sales	0		0	0	0	0	0	0	
In-Active	Vessels laid-up (non-operating/non-retention status)		Scrap	0								
X	Foreign Military Sales		Donation	0								
X	SINKEX		TBD	0								
X	Scrap		Total In-Active	0								
X	Donation		Total Active	2								
X	Remove From Service		Total Number of Ships*	2	* This represents the total number of vessels greater than 1,500 gross tons owned by NSF							

APPENDIX J

United States Coast Guard – List of Vessels

United States Coast Guard - USCG												
No.	Name	Type	Vessel Design	Status	Disposal Disposition	Avail for Disposal	Fiscal Year Removed from Service (Retirement)					Retirement Year
							FY 17	FY 18	FY 19	FY 20	FY 21	
1	Morgenthau WHEC 722	MT	High Endurance Cutter	Active			X					2017
2	Sherman WHEC 720	MT	High Endurance Cutter	Active				X				2018
3	Midgett WHEC 726	MT	High Endurance Cutter	Active					X			2019
4	Mellon WHEC 717	MT	High Endurance Cutter	Active						X		2020
5	Munro WHEC 724	MT	High Endurance Cutter	Active								TBD
5	USS Oak Ridge	MT	Floating Dry-Dock	Active								TBD
6	Polar Sea WAGB-11	MT	Heavy Ice Breaker	In-Active	Retain							TBD
7	Polar Star WAGB-10	MT	Heavy Ice Breaker	Active								TBD
8	Forward WMEC 911	MT	Medium Endurance Cutter	Active								TBD
9	Alex Haley WMEC-39	MT	Medium Endurance Cutter	Active								TBD
10	Bear WMEC 901	MT	Medium Endurance Cutter	Active								TBD
11	Escanaba WMEC 907	MT	Medium Endurance Cutter	Active								TBD
12	Harriet Lane WMEC 903	MT	Medium Endurance Cutter	Active								TBD
13	Legare WMEC 912	MT	Medium Endurance Cutter	Active								TBD
14	Mohawk WMEC 913	MT	Medium Endurance Cutter	Active								TBD
15	Northland WMEC 904	MT	Medium Endurance Cutter	Active								TBD
16	Seneca WMEC 906	MT	Medium Endurance Cutter	Active								TBD
17	Spencer WMEC 905	MT	Medium Endurance Cutter	Active								TBD
18	Tahoma WMEC 908	MT	Medium Endurance Cutter	Active								TBD
19	Tampa WMEC 902	MT	Medium Endurance Cutter	Active								TBD
20	Thetis WMEC 910	MT	Medium Endurance Cutter	Active								TBD
21	Campbell WMEC 909	MT	Medium Endurance Cutter	Active								TBD
22	Kimball WMSL 756	MT	National Security Cutter	Active								TBD
23	Bertholf WMSL 750	MT	National Security Cutter	Active								TBD
24	Waesche WMSL 751	MT	National Security Cutter	Active								TBD
25	Stratton WMSL 752	MT	National Security Cutter	Active								TBD
26	Hamilton WMSL 753	MT	National Security Cutter	Active								TBD
27	James WMSL 754	MT	National Security Cutter	Active								TBD
28	Munro WMSL-755	MT	National Security Cutter	Active								TBD
29	Mackinaw WLBB-30	MT	Heavy Ice Breaker	Active								TBD
30	Healy WAGB-20	MT	Medium Icebreaker	Active								TBD
Legend		Disposition Summary		Planned Removal from Service Summary								
MT	Merchant Type Vessel	Retain	1	Avail for Disposal	Fiscal Year Removed from Service							
C	Combatant Vessel	SINKEX	0	Disposal	FY 17	FY 18	FY 19	FY 20	FY 21			
Active	Vessels in use or in an operating/readiness status	Foreign Military Sales	0	0	1	1	1	1	0			
In-Active	Vessels laid-up (non-operating/non-retention status)	Scrap	0									
X	Foreign Military Sales	Donation	0									
X	SINKEX	TBD	0									
X	Scrap	Total In-Active	1									
X	Donation	Total Active	30									
X	Remove From Service	Total Number of Ships*	31	* This represents the total number of vessels greater than 1,500 gross tons owned by USCG								