# **OFFICE OF SHIP DISPOSAL PROGRAMS**

## ANNUAL REPORT FOR FISCAL YEAR 2014

## January 2015





# **U. S. Department of Transportation**

Maritime Administration



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## OFFICE OF SHIP DISPOSAL PROGRAMS ANNUAL REPORT FOR FISCAL YEAR 2014

### **EXECUTIVE SUMMARY**

The Maritime Administration (MARAD) develops this report annually to provide information on the disposition of Maritime Administration (MARAD) vessels within the National Defense Reserve Fleet (NDRF) that have been determined to be obsolete and classified as non-retention. This report is published each year and provides information on the Office of Ship Disposal Programs for the previous fiscal year.

#### Historic Low Number of Ship Waiting 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 annually. At the end of FY 2014, there were 23 non-retention ships remaining in MARAD's three NDRF sites and two of the Navy's Naval Inactive Ship Maintenance Facility (NISMF) sites 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 California Consent Decree requirements for the removal of obsolete ships from the Suisan Bay Reserve Fleet (SBRF). By the end of FY 2014, 52 ships had been removed from the SBRF for disposal, which leaves only five of the 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 2014**

In FY 2014, MARAD removed a total of 12 obsolete NDRF Vessels from the Beaumont Reserve Fleet (BRF), the Navy Inactive Ship Maintenance Facility in Pearl Harbor (NISMF-HI), the James River Reserve Fleet (JRRF) and the Suisun Bay Reserve Fleet, SBRF). Table 1, below identifies the fleet, date and name of the vessels removed for disposal in FY 2014.

	Vessel Removals FY 2014											
Fleet	Month Removed	Date Removed	Vessel	Contract Type								
BRF	May	5/28/2014	SIRIUS	Sale								
	June	6/4/2014	CAPE JOHN	Sale								
NISMF-HI	October	10/25/2014	Ex-DULUTH	Sale								
JRRF	October	10/23/2014	VANGUARD	Sale								
SBRF	November	11/18/2013	MOUNT WASHINGTON	Sale								
		11/26/2013	WILLAMETTE	Sale								
	February	2/19/2014	SHOSHONE	Service								
	March	3/4/2014	WYMAN	Service								
		3/4/2014	NORTHERN LIGHT	Service								
	May	5/15/2014	PONCHATOULA	Sale								
		5/29/2014	HASSAYAMPA	Sale								
	June	6/12/2014	KAWISHIWI	Sale								

#### Table 1. Vessel Removals in FY 2014

Note: Ex-DULUTH is a former Navy auxiliary vessel stricken from the Naval Vessel Register.

#### **BEST VALUE PROCUREMENT**

MARAD uses a two-step source selection process, first by qualifying ship recycling facilities and creating a pool of qualified facilities who 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 2014, MARAD awarded a total of 11 best value recycling contracts comprised of eight vessel sales contracts, which returned the highest offered single ship sales price and three service contracts, 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 three Suisun Bay Reserve Fleet vessels at a total cost of \$3,116,294.

#### SALES REVENUE AND DISTRIBUTION

MARAD ship recycling sales revenue in FY 2014 was \$9.8M on sales of eight obsolete NDRF vessels. Revenues from the sale of obsolete NDRF vessels do not supplement Ship Disposal Program appropriations. The National Maritime Heritage Act (NMHA) mandates 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 grant program per the Memorandum of Agreement with MARAD. For FY 2014, VORF fund distributions which included prior year accumulations, were as follows: \$18.7M for NDRF acquisition, repair and maintenance; \$6M to the six State Maritime Academies; \$839,096 transferred from MARAD's preservation resources to fund the National Maritime Heritage Grants Program (NMHGP); and \$2M to the National Park Service for the NMHGP.

#### **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 July 2014, Senior MARAD management visited the ship recycling industry in Brownsville TX, and talked with company representatives and toured the ship recycling facilities. In December 2014, MARAD organized a town hall meeting in Brownsville, TX hosting the ship recycling industry executives, Port officials and local Congressional representatives. Senior

MARAD leadership provided an overview of the program including future annual vessel disposal projections, status of agreement with Navy and Coast Guard to dispose their obsolete vessels using program expertise, and explaining the use of the best value process for award selection. The Maritime Administrator toured the ship recycling facilities and met individually with each recycler.

#### NUCLEAR SHIP SAVANNAH

MARAD's Office of Ship Disposal Programs manages one retention vessel, the Nuclear Ship *SAVANNAH* (NSS). NSS is a legacy asset; the world's first nuclear powered merchant ship. It is completely defueled and is actively licensed and inspected by the United States Nuclear Regulatory Commission (NRC). The vessel is maintained in protective storage in Baltimore, MD. The Savannah Technical Staff manages the NRC-licensed activities, which encompass the entire ship. There are three major components to the licensed activities program; radiological protection, nuclear compliance, and ship husbandry/custodial care. In addition, NSS is a National Historic Landmark, which places a preservation and stewardship obligation upon MARAD in accordance with the National Historic Preservation Act. This obligation is integrated into licensed activities in order to avoid cost burdens that might otherwise accrue if these obligations were managed separately.

## I. MARITIME ADMINISTRATION SHIP DISPOSAL PROGRAMS

#### Overview

MARAD established the Ship Disposal Program 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 2014, MARAD awarded dismantling contracts for 206 obsolete ships, removed 209 ships from MARAD fleet sites and U.S. Navy Inactive Ship Maintenance Facilities (NISMF), and completed disposal action on 205 ships. During this 14-year period, 130 ships were downgraded from retention to non-retention status and added to the disposal queue. At the start of FY 2015, there were only 23 ships designated as non-retention and available for disposal. It is anticipated that an additional three to five 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 Market**

The domestic ship recycling industry has rebounded from the 2008 economic downturn, which decreased market demand for ferrous and non-ferrous scrap metal by both domestic and foreign smelters, and dried up credit to ship recycling companies. Scrap steel prices recovered from the effects of the economic downturn and while volatile remained fairly stable through early 2014. In late 2014, scrap steel prices gradually declined by approximately 25% from the summer and are currently lower than they have been in the last two years. Expectations are that scrap steel prices will gradually rebound in late spring or early summer 2015.

At the start of FY 2015, there were six qualified MARAD ship recycling facilities all located on the Gulf Coast in Louisiana and Texas. Domestic ship recycling capacity is currently adequate to meet MARAD's requirements given the decreasing number of non-retention ships available for disposal. However, there is concern that the current available industrial capacity and competition for MARAD's vessels will decrease as production continues on the dismantling/recycling of the four Navy aircraft carriers at the three largest qualified recycling facilities and the pending award of two additional carrier recycling contracts by the Navy -- one each in FY 2016 and FY 2017. 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.

#### **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 National Invasive Species Act (NISA) compliance prior towing the ships to recycling facilities in other bio-geographical areas, and by September 2009 satisfied all requirements under the National Environmental Policy Act (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 donation are all disposal alternatives available to and utilized in the past by MARAD, dismantling/recycling is the most expedient and cost-effective method. Figure A below shows the number of vessels awarded for disposal since 2001 by each method. The 199 ships awarded in recycling contracts represents 95% of the 209 total vessels disposed of by MARAD since 2001. The other 10 vessels were disposed of through the other four disposal methods for which there is significantly less demand and greater cost for the Federal government.

The Agency has four qualified ship recycling facilities in Brownsville, Texas, one in New Orleans, Louisiana, and one in Amelia, Louisiana. MARAD qualifies ship recycling facilities to ensure the offeror has control of the recycling facility, sufficient knowledge, applicable infrastructure, resources and capabilities to successfully dispose of obsolete MARAD, Navy, or

other Federal Agency vessels while protecting the environment and worker health and safety. The Navy's ship disposal program, which includes Navy service contracts for combatant vessels and combatant vessel sales for recycling coordinated by Defense Logistics Agency (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 and 2015 for four aircraft carriers and the increase of contract awards for smaller combatant vessels by DLA in FY 2015 has the potential to cause industrial capacity shortages and less competition for contract awards similar to the circumstances observed in FY 2014.

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							-		-		-					
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*	Totals
Recycling (Fee for Service)	5	2	15	11	16	13	14	4	8	11	10	0	0	3	0	112
Recycling (Sales)	0	0	0	2	1	5	4	16	5	0	8	16	19	8	3	87
Artificial Reefing	1						2			1						4
SINKEX (Deep Sinking)					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		209

#### Figure A: Vessel Awards by Fiscal Year

#### **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 90 vessels for recycling from November 2008 through FY 2014 from NDRF and Navy fleet sites. Of the 90 awards, 58 were sales and 32 were service contracts and 80%, (72 of 90), 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 80% 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.

#### N.S. Savannah

MARAD is responsible for this legacy asset because it is the agency that built and operated it. MARAD designed, constructed and operated SAVANNAH from 1955 – 1970, with an initial operating license issued by the former Atomic Energy Commission in 1965. That license continues in effect under the present authority of the NRC. NSS was removed from service in 1970, and was subsequently defueled, made inoperable, and mothballed in the mid-1970s. The license was converted to possession-only in 1976 and since then NSS has been maintained in a condition of protective storage defined and regulated by the NRC. NSS will remain in protective storage until facility decommissioning is completed, and MARAD must maintain a proficient and competent nuclear capability until that time. Decommissioning (as defined and regulated by the NRC) involves the dismantlement, remediation and disposal of nuclear facilities and restoration of the site. License termination comes only after independent confirmatory surveys are completed by the NRC, usually about a year after dismantlement is complete. A 60 period is allowed to complete license termination; for MARAD the deadline is December 2031 based on the retroactive declaration of permanent cessation of operations. The decommissioning and license termination process is estimated to require seven years for NSS. The Savannah Technical Staff (STS) manages the license activities. STS is a blended organization of direct personnel, contractors and interagency support. STS draws heavily on related competencies within MARAD, DOT and the Department of Energy in order to minimize duplication of resources or excessive contracting.

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 maintains an active retention program of surveillance, monitoring and maintenance of the nuclear facilities housed onboard the ship, and custody, maintenance and repair of the ship as the primary physical boundary and protective barrier of the licensed site.

In FY 2014, MARAD continued its routine radiological survey program, conducted a pier-side underwater visual inspection of the hull, conducted periodic testing of the Cathodic Protection System, completed safety improvements to several exterior aft, port and starboard fire stair exit doors on the upper decks and accomplished modifications to the accommodation ladder. The combined fire and smoke detection and internal flooding and intrusion alarm system originally installed in 2009 and prone to periodic failures is in the process of being upgraded.

#### **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 biogeographical 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. Figure B shows the appropriations for the ship disposal program for the past five fiscal years.

#### **Figure B: Ship Disposal Appropriations**

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015		
\$12M	\$2.5M	\$2.5M	\$2.0M	\$2.0M*		

• 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.

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 Figure C 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 is \$2.0M with a carryover of \$3.6M.

#### **Sales Revenues**

Accrued revenue from the sale of non-retention NDRF vessels over the past 5-years (FY 2010-2014) has been approximately \$60.9 million for dismantling/recycling of 51 ships as shown in Figure C below.

rigare e, while the non-recention vessel sale revenues over the past 5 years											
Fiscal Year	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>					
Annual Sales Revenue (\$):	\$0	\$7.6M	\$18.9M	\$24.6M	\$9.8M	TBD					
Vessel Sales Contracts:	0	8	16	19	8	TBD					
Vessel Service Contracts:	12	10	0	0	3	TBD					
<b>Total Recycling Contracts:</b>	12	18	16	19	11	TBD					

Figure C. MADAD non untertion		arrow the a mast 5 reasons
Figure C: MARAD non-retention	vessel sale revenues	over the base 5 years

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 Ship Disposal Program appropriations. The National Maritime Heritage Act (NMHA) mandates 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 is 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 a minimum of 12.5% transferred to the National Park Service's grant program per the Memorandum of Agreement with MARAD. The distribution of the 25% to the USMMA and State Maritime Academies since 2009 is shown in Figure D below. In FY 2014, \$18.7M was distributed to the NDRF for acquisition, repair and maintenance activities. Distribution to the National Park Service (NPS) included \$2M in FY 2014, with an additional \$839,096 transferred from MARAD's preservation resources to fund the National Maritime Heritage Grant Program (NMHGP) awards for 2014. An additional \$2M was transferred in 2015 for the next cycle of NPS-administered NMHGP awards in 2015.

Sales proceeds for MARAD vessels sold in FYs 2015 and 2016 are expected to be negatively affected by the diminished level of domestic recycling competition and available capacity resulting from U.S. Navy recycling contracts for up to five aircraft carriers and DLA contracts for the recycling of 15-20 combatant vessels.

VORF Di	stributio	is to the	USMM	A and Sta	te Mari	time Aca	demies
ACADEMY	2009	2010	2011	2012	2013	2014	SUMMARY
USMMA	\$444561	\$188,143	\$147,959	\$962,000	\$0	\$0	\$1,742,663
MAINE	\$300,000	\$0	\$60,537	\$940,056	\$0	\$1,000,000	\$2,300,593
MASS	\$300,000	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$2,260,230
GREAT LAKES	\$50,000	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$2,010,230
TEXAS	\$0	\$0	\$20,180	\$940,056	\$0	\$1,000,000	\$1,960,230
CALIFORNIA	\$450,000	\$0	\$131,165	\$940,056	\$0	\$1,000,000	\$2,521,221
SUNY	\$300,000	\$0	\$131,165	\$940,056	\$0	\$1,000,000	\$2,371,221
TOTAL	\$1,844,561	\$188,143	\$531.366	\$6,602,333	\$0	\$6,000,000	\$15,166.403

Figure D: VORF Distributions to the	Maritime Academies
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#### Fiscal Year 2015 Disposal Activities

At the start of FY 2015, MARAD had 22 non-retention vessels not yet awarded under a disposal contract, including five vessels that were downgraded to non-retention status in September 2014. The goal for FY 2015 is the disposal of 10 non-retention vessels. All disposal contracts awarded in FY 2015 are anticipated to be for 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 10 per year. As shown in Figure F, 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 that no more than 20 total vessels are likely to be in non-retention status for the foreseeable future. Figure E below provides a five year projection of non-retention vessel disposals by fiscal year.

rigure E. Future vesser Disposari rojections												
Fiscal Year	2015	2016	2017	2018	2019							
Number of Vessels	9-10	6-8	4-6	4-6	4-6							

#### **Figure E: Future Vessel Disposal Projections**

Vessel downgrade projections beyond FY 2016 are estimated due to the numerous variables 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 Ready Reserve Force vessels and completion of the National Historic Preservation Act (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 2015 is 10 ships followed by an additional eight ships targeted for FY 2016. The 18 ships targeted for disposal in FY 2015 and FY 2016 will include the remaining five SBRF vessels, which will complete the requirement for the agency to remove 57 SBRF ships identified for removal in 2010 by the U.S. District court for the Eastern District of California (Consent Decree). MARAD vessels downgraded to non-retention status are anticipated to be approximately four ships in FY 2015 and three ships in FY 2016. With the removal of 18 ships in FY 2015 and 2016, and the downgrading and addition of seven vessels during that period to the disposal inventory, approximately 10 non-retention vessels will remain for disposal at the start of FY 2017.

Supported by industry projections for the price of scrap steel, it is anticipated that disposal costs overall will remain at FY 2014 levels through FY 2015 and FY 2016. However, the level of domestic recycling competition and available capacity will continue to be tested as a result of the U.S. Navy award of recycling contracts for four aircraft carriers in FY 2014 and FY 2015 each with a two year period of performance. It is anticipated the Navy will also award two additional aircraft carriers in FY 2016 and 2017, further stressing 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, projections for FY 2015 indicate DLA will solicit sales offers for the award of recycling contracts for 15 decommissioned Navy combatant vessels, which will be followed by the sale for recycling of an additional four Navy ships by DLA in FY 2016.

#### **Ship Disposal Program Performance Measures**

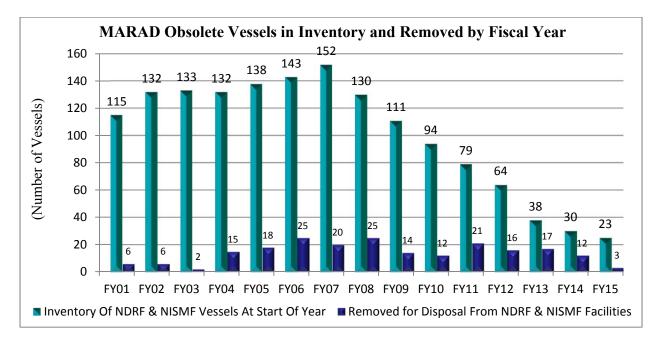
The Program's annual performance measures of vessels awarded, vessels removed and vessels disposed are the most direct measure of progress in disposing of obsolete ships and meeting the Agency environmental stewardship targets. MARAD'S focus has been on on expedited removal for disposal of SBRF vessels, 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 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 F 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 December of 2014. As shown in Figure G, since FY 2001, MARAD has exceeded the ship removal target by an average of 4.4 vessels per year over the 14 year period -- missing the annual target in only two 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.



#### Figure F: 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.

Numbe	<b>Figure G: Vessel Removal Projections Compared to Actual Vessel Removals</b> Number of obsolete non-retention <u>vessels removed</u> annually from MARAD NDRF and Navy NISMF sites for subsequent disposal.															
FY	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Totals (thru FY 2014)</u>
Target: Actual: Cumul												16		12	10 TBD	n the fleet per the $147$
Consei	nt De	ecree	. Eac	h yea	ır's ta	rget	and a	ctual	total	s are	cumu	lative	e tota	ls sin	ce 201	0.
FY	<u>20</u>	<u>010</u>	<u>2011</u>	<u>2012</u>	<u>201</u>	<u>3 20</u>	<u>14</u> 2	<u>015</u>	<u>2016</u>	<u>2017</u>						
Target: Actual:		0	20 26	28 36	32 44	-	8 52 1	44 TBD	50 TBD	57 TBD	)					

The differential ( $\Delta$ ) between the targets and actual results for vessel removals over the last 14 years shows that all annual targets have been met or exceeded except for two years. The cumulative differential ( $\Delta$ ) 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 United States Coast Guard's (USCG) 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 NISMF 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 \$500 thousand 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 Agreement, MARAD will clean, maintain and dispose of these ships in a manner that eliminates unpermitted sources of Bay pollution. The 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 will be removed for disposal by September 30, 2017. As of the end of FY 2014, 52 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.

#### Conclusions

An aggressive program of maximizing the use of disposal funding and pursuing all feasible disposal options has resulted in the removal of 209 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 January 1, 2015 there were only 18 obsolete 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 MARAD will continue to investigate all alternatives to expedite the disposal of its obsolete vessels at qualified facilities and at the least cost to the Government, while giving consideration to worker safety and the environment, as required by the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 Pub. L. 106-398, § 3502; 114 Stat. 1654A-490.

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